09530807 Page 1

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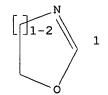
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=>
Uploading 09530807.str

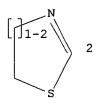
L1 STRUCTURE UPLOADED

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L1 HAS NO ANSWERS L1 STR



G<del>2</del>——Ak



G1 C,N G2 [@1],[@2]

Structure attributes must be viewed using STN Express query preparation.

=> s 11 sss sam

SAMPLE SEARCH INITIATED 17:03:27 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 55628 TO ITERATE

1.8% PROCESSED 1000 ITERATIONS 31 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*INCOMPLETE\*\*

BATCH \*\*INCOMPLETE\*\*

PROJECTED ITERATIONS: EXCEEDS 1000000

PROJECTED ANSWERS: EXCEEDS 31999

L2 31 SEA SSS SAM L1

=> s l1 full

FULL SEARCH INITIATED 17:03:33 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - >1,000,000 TO ITERATE

< 19.0% PROCESSED 190393 ITERATIONS 8854 ANSWERS

< 36.9% PROCESSED 369313 ITERATIONS 15963 ANSWERS

< 40.0% PROCESSED 400000 ITERATIONS 17227 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.42

FULL FILE PROJECTIONS: ONLINE \*\*INCOMPLETE\*\*

BATCH \*\*INCOMPLETE\*\*

PROJECTED ITERATIONS: EXCEEDS 1000000 PROJECTED ANSWERS: EXCEEDS 47182

L3 17227 SEA SSS FUL L1

=> fil caplus

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FULL ESTIMATED COST ENTRY SESSION 133.87 134.02

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FILE COVERS 1907 - 27 Dec 2001 VOL 135 ISS 26 FILE LAST UPDATED: 26 Dec 2001 (20011226/ED)

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CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

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=> s 13 full

L4 1932 L3

=> s 14 and diseases?

152528 DISEASES? 132 L4 AND DISEASES?

=> s 15 and treatment?

1710353 TREATMENT? L6 97 L5 AND TREATMENT?

=> s 16 and method?

2935163 METHOD? L7 10 L6 AND METHOD?

 $\Rightarrow$  d 17 1-10 ibib abs hitstr

L7 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2001:863509 CAPLUS

TITLE: Methods for treating immunomediated

inflammatory disorders and changing skin pigmentation

INVENTOR(S): Costanzo, Michael J.

PATENT ASSIGNEE(S): Ortho-McNeil Pharmaceutical, Inc., USA

SOURCE: U.S., 52 pp., Cont.-in-part of U.S. Ser. No. 110,409.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

US 6323219 B1 20011127 US 1999-238882 19990127

PRIORITY APPLN. INFO:: US 1998-80441 P 19980402
US 1998-110409 A2 19980706

AB Methods and compns. are provided for bringing about changes in skin pigmentation and for treating inflammatory disorders. More particularly, the invention provides compds. which affect melanogenesis and can be used as depigmenting agents or as agents for darkening skin utilizing the protease-activated receptor 2 (PAR-2) pathway and compds. for the prevention and treatment of immunomediated inflammatory diseases, particularly those assocd. with the respiratory tract, e.g. asthma and allergic rhinitis.

IT 374898-12-1

RL: BSU (Biological study, unclassified); BIOL (Biological study) (immunomediated inflammatory disorder **treatment** and changing skin pigmentation)

RN 374898-12-1 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

CM 1

CRN 179745-49-4 CMF C30 H37 N7 O5 S

Absolute stereochemistry.

CM 2

CRN 9078-38-0 CMF Unspecified CCI MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*
IT 178925-93-4 178925-93-4D, prodrug derivs.

178925-96-7 179745-47-2 179745-49-4

179745-49-4D, prodrug derivs. 179745-51-8 179745-55-2 179745-59-6 179745-59-6D, prodrug derivs. 179745-67-6 179745-69-8 179745-69-8D , prodrug derivs. 179745-71-2 179745-71-2D, prodrug derivs. 179745-73-4 179745-75-6 179745-79-0 179745-81-4 179745-83-6 179745-83-6D, prodrug derivs. 179745-85-8 179745-85-8D, prodrug derivs. 179745-87-0 179745-89-2 179745-93-8 179745-95-0 179745-97-2 179746-03-3 179746-05-5 179746-07-7 179746-09-9 179746-09-9D, prodrug derivs. 179746-15-7 179746-17-9 179914-94-4 179915-00-5 179915-06-1 179915-06-1D, prodrug derivs. 186181-59-9 374898-10-9 374898-10-9D, prodrug derivs. 374898-13-2 RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (immunomediated inflammatory disorder treatment and changing skin pigmentation) RN 178925-93-4 CAPLUS L-Prolinamide, N-methyl-D-phenylalanyl-N-[(1S)-4-[(aminoiminomethyl)amino]-1-(2-benzothiazolylcarbonyl)butyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 178925-93-4 CAPLUS
CN L-Prolinamide,
N-methyl-D-phenylalanyl-N-[(1S)-4-[(aminoiminomethyl)amino]1-(2-benzothiazolylcarbonyl)butyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 178925-96-7 CAPLUS
CN L-Prolinamide,

N-methyl-D-phenylalanyl-N-[(1S)-4-[(aminoiminomethyl)amino]-

1-(2-benzoxazolylcarbonyl)butyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 179745-47-2 CAPLUS

CN L-Prolinamide,

N-methyl-D-phenylalanyl-N-[(1S)-4-[(aminoiminomethyl)amino]-1-(2-benzothiazolylcarbonyl)-1-methylbutyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 179745-49-4 CAPLUS

CN L-Prolinamide,

INDEX

NAME)

Absolute stereochemistry.

.RN 179745-49-4 CAPLUS

CN L-Prolinamide,

N-methyl-D-phenylalanyl-N-[(1S)-4-[(aminoiminomethyl)amino]-

1-[[6-(methoxycarbonyl)-2-benzothiazolyl]carbonyl]butyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 179745-51-8 CAPLUS
CN L-Prolinamide,
N-methyl-D-phenylalanyl-N-[(1S)-4-[(aminoiminomethyl)amino]1-[(6-carboxy-2-benzothiazolyl)carbonyl]butyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 179745-59-6 CAPLUS
CN L-Prolinamide,
N-methyl-D-phenylalanyl-N-[(1S)-4-[(aminoiminomethyl)amino]1-[(6-fluoro-2-benzothiazolyl)carbonyl]butyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 179745-59-6 CAPLUS
CN L-Prolinamide,

N-methyl-D-phenylalanyl-N-[(1S)-4-[(aminoiminomethyl)amino]-1-[(6-fluoro-2-benzothiazolyl)carbonyl]butyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 179745-67-6 CAPLUS
CN L-Prolinamide, 3-cyclohexyl-N-methyl-D-alanyl-N-[(1S)-4[(aminoiminomethyl)amino]-1-(2-benzothiazolylcarbonyl)butyl]- (9CI) (CA
INDEX NAME)

RN 179745-69-8 CAPLUS

CN L-Prolinamide, 2,3,4,5,6-pentafluoro-N-methyl-D-phenylalanyl-N-[(1S)-4-[(aminoiminomethyl)amino]-1-(2-benzothiazolylcarbonyl)butyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 179745-69-8 CAPLUS

CN L-Prolinamide, 2,3,4,5,6-pentafluoro-N-methyl-D-phenylalanyl-N-[(1S)-4-[(aminoiminomethyl)amino]-1-(2-benzothiazolylcarbonyl)butyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 179745-71-2 CAPLUS

CN Cyclopentanecarboxamide, N-[(1S)-4-[(aminoiminomethyl)amino]-1-(2-benzothiazolylcarbonyl)butyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 179745-71-2 CAPLUS

CN Cyclopentanecarboxamide, N-[(1S)-4-[(aminoiminomethyl)amino]-1-(2-benzothiazolylcarbonyl)butyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 179745-73-4 CAPLUS

CN L-Prolinamide, 4-fluoro-N-methyl-D-phenylalanyl-N-[(1S)-4[(aminoiminomethyl)amino]-1-(2-benzothiazolylcarbonyl)butyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 179745-75-6 CAPLUS

CN L-Prolinamide, (2R)-N-methyl-2-phenylglycyl-N-[(1S)-4[(aminoiminomethyl)amino]-1-(2-benzothiazolylcarbonyl)butyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 179745-79-0 CAPLUS

CN L-Prolinamide, N-methyl-.beta.-phenyl-D-phenylalanyl-N-[(1S)-4[(aminoiminomethyl)amino]-1-(2-benzothiazolylcarbonyl)butyl]- (9CI) (CA
INDEX NAME)

RN 179745-81-4 CAPLUS
CN L-Prolinamide, (2R)-2-cyclohexyl-N-methylglycyl-N-[(1S)-4- '
[(aminoiminomethyl)amino]-1-(2-benzothiazolylcarbonyl)butyl]- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.

RN 179745-83-6 CAPLUS
CN L-Prolinamide,
N-methyl-D-phenylalanyl-N-[(1S)-2-(2-benzothiazolyl)-2-oxo1-(phenylmethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 179745-85-8 CAPLUS

CN L-Prolinamide, N-methyl-D-phenylalanyl-N-[(1S)-1-(2-benzothiazolylcarbonyl)pentyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 179745-85-8 CAPLUS

CN L-Prolinamide, N-methyl-D-phenylalanyl-N-[(1S)-1-(2-benzothiazolylcarbonyl)pentyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 179745-87-0 CAPLUS

CN L-Prolinamide,

N-methyl-D-phenylalanyl-N-[(1S)-4-[(aminoiminomethyl)amino]-1-(2-benzothiazolylcarbonyl)butyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 179745-89-2 CAPLUS

CN L-Prolinamide, D-phenylalanyl-N-[(1S)-4-[(aminoiminomethyl)amino]-1-(2-benzothiazolylcarbonyl)butyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 179745-93-8 CAPLUS

CN L-Valinamide,

N-methyl-D-phenylalanyl-N-[(1S)-4-[(aminoiminomethyl)amino]-1-(2-benzothiazolylcarbonyl)butyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 179745-95-0 CAPLUS

CN Guanidine, N-[(4S)-5-(2-benzothiazolyl)-4-(formylamino)-5-oxopentyl]-(9CI) (CA INDEX NAME)

=> d 17 2-10 ibib abs hitstr

L7 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER:

2001:254880 CAPLUS

DOCUMENT NUMBER:

134:280856

TITLE:

Condensed heterocyclic compounds inhibiting

macrophage

migration inhibitory factor (MIF), method

INVENTOR(S):

for their preparation and their use for drugs Sugihara, Yoshihiro; Horiguchi, Takashi; Maezaki,

Hironobu; Kimura, Atsuhide

PATENT ASSIGNEE(S):

Takeda Chemical Industries, Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 60 pp.

DOCUMENT TYPE:

CODEN: JKXXAF Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

APPLICATION NO. PATENT NO. DATE KIND DATE \_\_\_\_\_ \_\_\_\_ -----20010410 JP 2000-233157 20000728 JP 2001097979 A2 JP 1999-214395 A 19990728 PRIORITY APPLN. INFO.: MARPAT 134:280856 OTHER SOURCE(S):

GI

and

AB The title compds. [I; ring A and B = (un)substituted 4- to 8-membered heterocyclic ring, excluding 5H-pyrimido[5,4-b]indole ring; U = Q1, -Q-(CH2)k-W-R3; wherein R1 = halo, group linked through O, N, C, or S; R2 = (un)substituted hydrocarbyl or heterocyclyl; m, n = 1-4 integer; k =

2-6 integer; R3 = (un) substituted aryl or heterocyclyl; Q = (un) substituted N,

S, O, (un)substituted C; W = CR6R7 (wherein R6 = halo, group linked through O, N, C, or S; R7 = H, optionally substituted hydrocarbyl or heterocyclyl); when W is CO, Q is (un)substituted N] and [II; ring A and B, Q, W, R3 = same as above; Z = N, (un)substituted C; R4, R5 = H, halo, group linked through C, O, N, or S; or when Z is C atom, R5 is linked to Z

to from the ring C; when W is CO, Q is (un)substituted N, O, or (un)substituted C] are prepd. These compds. are useful for the prevention  ${\sf C}$ 

and treatment of kidney diseases, heart diseases, inflammatory diseases, allergies, autoimmune diseases, arteriosclerosis, infections, malignant tumors, and rejection after organ transplant, and diabetic retinopathy. Thus, 7-(methylthio)[1,3]thiazolo[5,4-d]pyrimidine-2-carboxylic acid Me ester was oxidized by m-chloroperbenzoic acid in CHCl3 for 20 min and condensed with 4-amino-1-phenylbutanone ethylene acetal in DMF to give 7-[(3-(2-phenyl-1,3-dioxolan-2-yl)propyl)amino][1,3]thiazolo[5,4-d]pyrimidine-2-carboxylic acid Me ester which was amidated with NH3 in MeOH at 60.degree. for 2 h to give 7-[(3-(2-phenyl-1,3-dioxolan-2-yl)propyl)amino][1,3]thiazolo[5,4-d]pyrimidine-2-carboxamide. The latter compd. was dissolved in THF, treated with 1 N aq. HCl, stirred for 20,

neutralized with K2CO3 to give, after salt formation with HCl,

7-[(4-oxo-4-phenylbutyl)amino][1,3]thiazolo[5,4-d]pyrimidine-2-carboxamide hydrochloride (III). III at 17 .mu.M in vitro inhibited by 87% the MIF-dependent proliferation of T-cells.

IT 333385-96-9P 333386-26-8P 333386-39-3P 333386-43-9P 333386-47-3P 333386-49-5P 333386-52-0P 333386-53-1P 333387-16-9P 333387-17-0P 333387-68-1P 333388-18-4P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of condensed heterocyclic compds. inhibiting macrophage

migration inhibitory factor (MIF) as drugs)
RN 333385-96-9 CAPLUS
CN 4-Piperidinol, 1-[2-(2-methylpropyl)thiazolo[5,4-d]pyrimidin-7-yl]-4-phenyl- (9CI) (CA INDEX NAME)

RN 333386-26-8 CAPLUS CN 4-Piperidinol, 4-phenyl-1-[2-(1-phenylethyl)thiazolo[5,4-d]pyrimidin-7-yl]-(9CI) (CA INDEX NAME)

RN 333386-39-3 CAPLUS
CN Thiazolo[5,4-d]pyrimidine-2-acetic acid, 7-(4-hydroxy-4-phenyl-1-piperidinyl)-, ethyl ester (9CI) (CA INDEX NAME)

RN 333386-43-9 CAPLUS
CN Thiazolo[5,4-d]pyrimidine-2-acetic acid, 7-(4-hydroxy-4-phenyl-1-piperidinyl)- (9CI) (CA INDEX NAME)

RN

333386-47-3 CAPLUS
1-Propanone, 1-[7-(4-hydroxy-4-phenyl-1-piperidinyl)thiazolo[5,4-CN d]pyrimidin-2-yl]-2-methyl- (9CI) (CA INDEX NAME)

RN

333386-49-5 CAPLUS 1-Butanone, 1-[7-(4-hydroxy-4-phenyl-1-piperidinyl)thiazolo[5,4-CN d]pyrimidin-2-yl]-3-methyl- (9CI) (CA INDEX NAME)

333386-52-0 CAPLUS RN

Thiazolo[5,4-d]pyrimidine-2-acetamide, N-butyl-7-(4-hydroxy-4-phenyl-1-CN piperidinyl) - (9CI) (CA INDEX NAME)

RN 333386-53-1 CAPLUS
CN Pyrrolidine, 1-[[7-(4-hydroxy-4-phenyl-1-piperidinyl)thiazolo[5,4-d]pyrimidin-2-yl]acetyl]- (9CI) (CA INDEX NAME)

### HCl

## HCl

RN 333387-68-1 CAPLUS

CN Ethanone,

1-[7-[(3-hydroxy-3-phenylpropyl)amino]thiazolo[5,4-d]pyrimidin-2-yl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & & \\ \text{Ph} & & & & \\ & & & \\ \text{HO-CH-CH}_2\text{-CH}_2\text{-NH} & & \\ \end{array}$$

## ● HCl

RN 333388-18-4 CAPLUS
CN Ethanone,
1-[7-[(3-hydroxy-3-phenylpropyl)amino]thiazolo[5,4-d]pyrimidin-2yl]- (9CI) (CA INDEX NAME)

# IT 333388-19-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. of condensed heterocyclic compds. inhibiting macrophage migration inhibitory factor (MIF) as drugs)

RN 333388-19-5 CAPLUS

CN Ethanone, 1-[7-(methylthio)thiazolo[5,4-d]pyrimidin-2-yl]- (9CI) (CA INDEX NAME)

L7 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER:

2000:573666 CAPLUS

DOCUMENT NUMBER:

133:164010

TITLE:

Preparation of caprolactams, piperidinones, and pyrrolidinones as Factor Xa inhibitors in prevention

or treatment of thromboses, coronary artery

disease, or cerebrovascular disease in mammals Stein, Philip D.; Bisacchi, Gregory S.; Shi, Yan;

O'Connor, Stephen P.; Li, Chi

PATENT ASSIGNEE(S):

Bristol-Myers Squibb Company, USA

SOURCE:

PCT Int. Appl., 284 pp.

DOCUMENT TYPE:

INVENTOR(S):

CODEN: PIXXD2
Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

|       | PATENT NO.    |      |     |      |             | ND          | DATE |      |     | A              | PPLI  | CATIO      | ο.   | DATE     |      |          |     |     |  |
|-------|---------------|------|-----|------|-------------|-------------|------|------|-----|----------------|-------|------------|------|----------|------|----------|-----|-----|--|
|       | WO 2000047207 |      |     |      |             | A1 20000817 |      |      |     |                | 200   | :<br>00-U: | 3    | 20000202 |      |          |     |     |  |
|       |               | w:   | ΑE, | AL,  | AM,         | AT,         | AU,  | ΑZ,  | BA, | BB,            | BG,   | BR,        | BY,  | CA,      | CH,  | CN,      | CR, | CU, |  |
|       |               |      | CZ, | DE,  | DK,         | DM,         | EE,  | ES,  | FI, | GB,            | GD,   | GE,        | GH,  | GM,      | HR,  | HU,      | ID, | IL, |  |
|       |               |      | IN, | IS,  | JP,         | ΚE,         | KG,  | ΚP,  | KR, | ΚZ,            | LC,   | LK,        | LR,  | LS,      | LT,  | LU,      | LV, | MA, |  |
|       |               |      | MD, | MG,  | MK,         | MN,         | MW,  | MX,  | NO, | NZ,            | PL,   | PT,        | RO,  | RU,      | SD,  | SE,      | SG, | SI, |  |
|       |               |      | SK, | SL,  | ТJ,         | TM,         | TR,  | TT,  | UA, | UG,            | UZ,   | VN,        | YU,  | ZA,      | ZW,  | AM,      | ΑZ, | BY, |  |
|       |               |      | KG, | ΚZ,  | MD,         | RU,         | ТJ,  | TM   |     |                |       |            |      |          |      |          |     |     |  |
|       |               | RW:  | GH, | GM,  | KE,         | LS,         | MW,  | SD,  | SL, | SZ,            | ΤZ,   | UG,        | ZW,  | AT,      | BE,  | CH,      | CY, | DE, |  |
|       |               |      | DK, | ES,  | FI,         | FR,         | GB,  | GR,  | ΙE, | IT,            | LU,   | MC,        | NL,  | PT,      | SE,  | BF,      | ВJ, | CF, |  |
|       |               |      | CG, | CI,  | CM,         | GΑ,         | GN,  | GW,  | ML, | MR,            | NE,   | SN,        | TD,  | ΤG       |      |          |     |     |  |
|       | US            | 6297 | 233 |      | B1 20011002 |             |      |      |     | US 2000-496571 |       |            |      |          |      | 20000202 |     |     |  |
|       | EΡ            | 1156 | 803 |      | A.          | 1           | 2001 | 1128 |     | E              | P 20  | 00-9       | 1450 | 5        | 2000 | 0202     |     |     |  |
|       |               | R:   | AT, | BE,  | CH,         | DE,         | DK,  | ES,  | FR, | GB,            | GR,   | IT,        | LI,  | LU,      | NL,  | SE,      | MC, | PT, |  |
|       |               |      | ΙE, | SI,  | LT,         | LV,         | FI,  | RO   |     |                |       |            |      |          | •    | •        |     |     |  |
| PRIOR | (TI           | APP  | LN. | INFO | . :         |             |      |      | 1   | US 1           | 999-  | 1193       | 72   | P        | 1999 | 0209     |     |     |  |
|       |               |      |     |      |             |             |      |      | 1   | US 1           | 999-: | 1674:      | 28   | Р        | 1999 | 1124     |     |     |  |
|       |               |      |     |      |             |             |      |      | 1   | WO 2           | 000-1 | JS28       | 83   | W        | 2000 | 0202     |     |     |  |

OTHER SOURCE(S):

MARPAT 133:164010

GΙ

$$\begin{array}{c|c}
R^1 & O \\
R^2 - N & NH & N & R^3 \\
N & N & O \\
R & R
\end{array}$$

AB Title chiral compds. [I; R = CN, CONH2, COOCH2CH3, COC6H5, SO2NH2, OCH3, SO2N(CH3)2, SO2CH3, arylsulfonyl, heterocyclosulfonyl, (un)substituted Ph,

Ι

heterocyclyl, heterocycleocarbonyl, alkoxylcarbonyl, arylaminocarbonyl;

II

R1
= H, arylalkyl; R2 = alkyl, (un)substituted Ph, benzoheterocyclyl, cyclopentyl; R3 = heterocyclylamino, heterocyclyl, alkoxy, cycloalkylamino, OH; n = 0, 1, 2], pharmaceutically acceptable salts,

and stereoisomers are pred. as Factor Xa inhibitors and are useful as anticoagulants (no data). A **method** for treating cardiovascular **diseases** assocd. with thromboses is also provided. Thus, the title compd. II was prepd.

IT 288075-71-8P 288079-58-3P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of caprolactams as Factor Xa inhibitors in prevention or treatment of thromboses, coronary artery disease, or cerebrovascular disease in mammals)

RN 288075-71-8 CAPLUS

CN Pyrrolidine,

1-[[(3S)-3-[[(cyanoamino)[(5-methoxythiazolo[5,4-b]pyridin-2-yl)amino]methylene]amino]hexahydro-2-oxo-1H-azepin-1-yl]acetyl]- (9CI) (CA INDEX NAME)

288079-58-3 CAPLUS RN

CN Benzamide,

N-[[[(3S)-hexahydro-2-oxo-1-[2-oxo-2-(1-pyrrolidinyl)ethyl]-1H-

azepin-3-yl]amino][(5-methoxythiazolo[5,4-b]pyridin-2-yl)amino]methylene]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

REFERENCE(S):

(1) Lowe; US 5484917 A 1996 CAPLUS

(2) Lowe; US 5618811 A 1997 CAPLUS

ANSWER 4 OF 10 CAPLUS COPYRIGHT 2001 ACS L7

ACCESSION NUMBER:

2000:456867 CAPLUS

DOCUMENT NUMBER:

133:84284

TITLE:

A combination of fructose-1,6-bisphosphatase (FBPase)

inhibitors and insulin sensitizers for the

treatment of diabetes

INVENTOR(S):

Erion, Mark D.; Vanpoelje, Paul

Metabasis Therapeutics, Inc., USA PATENT ASSIGNEE(S):

SOURCE:

PCT Int. Appl., 306 pp.

DOCUMENT TYPE:

CODEN: PIXXD2 Patent

English

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PA      | PATENT NO.             |            |     |     |             | DATE |      |      | A                 | PPLI | CATI | и ис | ٥.   | DATE     |      |     |     |  |
|---------|------------------------|------------|-----|-----|-------------|------|------|------|-------------------|------|------|------|------|----------|------|-----|-----|--|
|         |                        |            |     |     | A2 20000706 |      |      |      | W                 | 0 19 | 99-U | s307 | 13   | 19991222 |      |     |     |  |
| WC      |                        | 2000038666 |     |     | A3          |      |      |      |                   |      |      |      |      |          |      |     |     |  |
|         | W:                     | ΑE,        | AL, | AM, | AT,         | ΑU,  | ΑZ,  | BA,  | BB,               | ВG,  | BR,  | BY,  | CA,  | CH,      | CN,  | CU, | CZ, |  |
|         |                        | DE,        | DK, | EE, | ES,         | FI,  | GB,  | GD,  | GE,               | GH,  | GM,  | HR,  | HU,  | ID,      | IL,  | IN, | IS, |  |
|         |                        |            |     |     |             |      |      |      |                   |      |      |      |      | LV,      |      |     |     |  |
|         |                        |            |     |     |             |      |      |      |                   |      |      |      |      | SI,      |      |     |     |  |
|         | TM, TR,                |            |     |     |             |      |      |      |                   |      |      |      |      |          |      |     |     |  |
|         |                        | RU, TJ,    |     |     | •           | ·    | •    | •    |                   |      |      |      |      |          |      |     |     |  |
|         | RW:                    | GH,        | GM, | KE, | LS,         | MW,  | SD,  | SL,  | SZ,               | TZ,  | UG,  | ZW,  | ΑT,  | BE,      | CH,  | CY, | DE, |  |
|         |                        |            |     |     |             |      |      |      |                   |      |      |      |      | SE,      |      |     |     |  |
|         |                        | CG,        | CI, | CM, | GΑ,         | GN,  | GW,  | ML,  | MR,               | NE,  | SN,  | TD,  | ΤG   |          |      |     |     |  |
| EF      | 1143                   | 955        |     | A   | 2           | 2001 | 1017 |      | E                 | P 19 | 99-9 | 6431 | 3    | 1999     | 1222 |     |     |  |
|         | R:                     | ΑT,        | BE, | CH, | DE,         | DK,  | ES,  | FR,  | GB,               | GR,  | IT,  | LI,  | LU,  | NL,      | SE,  | MC, | PT, |  |
|         |                        | ΙE,        | FI  |     |             |      |      |      |                   |      |      |      |      |          |      |     |     |  |
| NC      | 2001                   | 0031       | 15  | A   |             | 2001 | 0824 |      | N                 | 20   | 01-3 | 115  |      | 2001     | 0621 |     |     |  |
| PRIORIT | PRIORITY APPLN. INFO.: |            |     |     |             |      |      |      | US 1998-114718    |      |      | P    | 1998 | 1224     |      |     |     |  |
|         |                        |            |     |     |             |      |      | 1    | WO 1999-US30713 W |      |      |      | W    | 19991222 |      |     |     |  |
|         |                        |            |     |     |             |      |      | 0400 | 4                 |      |      |      |      |          |      |     |     |  |

MARPAT 133:84284 OTHER SOURCE(S):

Pharmaceutical compns. contg. an FBPase inhibitor and an insulin sensitizer are provided as well as methods for treating diabetes

(2,2,2-trifluoroethoxy)-, (.alpha.S)- (9CI) (CA INDEX NAME)

Benzenepropanoic acid, 4-[2-(2-benzoxazolylmethylamino)ethoxy]-.alpha.-

Absolute stereochemistry. Rotation (-).

RN 204928-87-0 CAPLUS

CN

CN Benzenepropanoic acid, 4-[2-(2-benzoxazolylmethylamino)ethoxy]-.alpha.ethoxy-3-iodo- (9CI) (CA INDEX NAME)

RN 204928-88-1 CAPLUS

CN Benzenepropanoic acid, 4-[2-(2-benzoxazolylmethylamino)ethoxy]-.alpha.- (2,2,2-trifluoroethoxy)-, (.alpha.R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 281221-94-1 CAPLUS

CN Benzenepropanoic acid, 4-[2-(2-benzoxazolylmethylamino)ethoxy]-.alpha.-ethoxy-3-iodo-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2001 ACS ACCESSION NUMBER: 2000:260233 CAPLUS

DOCUMENT NUMBER: 132:293662

TITLE: Preparation of pyrroledione derivatives as inhibitors

of glycogen synthase kinase-3

INVENTOR(S): Coghlan, Matthew Paul; Fenwick, Ashley Edward; Haigh,

David; Holder, Julie Caroline; Ife, Robert John; Reith, Alastair David; Smith, David Glynn; Ward,

Robert William

PATENT ASSIGNEE(S): Smithkline Beecham P.L.C., UK

SOURCE: PCT Int. Appl., 131 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. KIND  |    |     |      |     | DATE |                                  |      | A   | PPLI | CATI | ON NO | o. : | DATE |      |     |     |     |  |
|------------------|----|-----|------|-----|------|----------------------------------|------|-----|------|------|-------|------|------|------|-----|-----|-----|--|
|                  |    |     |      |     |      |                                  |      |     | _    |      |       |      |      |      |     |     |     |  |
| WO 2000021927 A2 |    |     |      |     | 2    | 20000420 WO 1999-GB3280 19991005 |      |     |      |      |       |      |      | 1005 |     |     |     |  |
| WO 2000021927 A3 |    |     |      |     | 3    | 2000                             | 0713 |     |      |      |       |      |      |      |     |     |     |  |
|                  | W: | AE, | AL,  | AM, | ΑT,  | AU,                              | ΑZ,  | BA, | BB,  | BG,  | BR,   | BY,  | CA,  | CH,  | CN, | CR, | CU, |  |
|                  |    | CZ, | DE,  | DK, | DM,  | EE,                              | ES,  | FI, | GB,  | GD,  | GE,   | GH,  | GM,  | HR,  | HU, | ID, | IL, |  |
|                  |    | IN, | IS,  | JP, | ΚE,  | KG,                              | ΚP,  | KR, | ΚZ,  | LC,  | LK,   | LR,  | LS,  | LT,  | LU, | LV, | MD, |  |
|                  |    | MG, | MK,  | MN, | MW,  | MX,                              | NO,  | ΝZ, | PL,  | PT,  | RO,   | RU,  | SD,  | SE,  | SG, | SI, | SK, |  |
|                  |    | STO | T.T. | TM. | TR.  | ΨΨ.                              | ΤΖ.  | UA. | UG.  | US.  | 112.  | VN.  | YU.  | ZA.  | ZW. | AM. | A2. |  |

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BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
            DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
            CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                        AU 1999-61116
                                                           19991005
                     A1 20000501
    AU 9961116
                           20010801
                                         EP 1999-947744
                                                           19991005
                      A1
    EP 1119548
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO
                                       GB 1998-21974
                                                        A 19981008
PRIORITY APPLN. INFO.:
                                                        A 19981214
                                       GB 1998-27521
                                                       A 19981217
                                       GB 1998-27883
                                                       A 19990310
                                       GB 1999-5518
                                                       A 19990326
                                       GB 1999-7086
                                                       A 19990816
                                       GB 1999-19362
                                                      W 19991005
                                       WO 1999-GB3280
                        MARPAT 132:293662
```

OTHER SOURCE(S):

A method for the treatment of conditions assocd. With AΒ a need for inhibition of GSK-3 (glycogen synthase kinase-3), such as diabetes, dementias such as Alzheimer's disease and manic depression which

method comprises the administration of a pharmaceutically effective, non-toxic amt. of a compd. of formula I [R is hydrogen, alkyl, aryl, or aralkyl; R1 is hydrogen, alkyl, aralkyl, hydroxyalkyl or alkoxyalkyl; R2 is substituted or unsubstituted aryl or substituted or unsubstituted heterocyclyl; R3 is hydrogen, substituted or unsubstituted alkyl, cycloalkyl, alkoxyalkyl, substituted or unsubstituted aryl, substituted or unsubstituted heterocyclyl or aralkyl wherein the aryl moiety is substituted or unsubstituted; or, R1 and R3 together with the nitrogen to which they are attached form a single or fused, optionally substituted, satd. or unsatd. heterocyclic ring] to a human or non-human mammal in need thereof. The most potent compds. of this invention show IC50 values in the range of 10 to 100 nM against glycogen synthase kinase-3.

### ΙT 264220-23-7P 264220-25-9P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of pyrroledione derivs. as inhibitors of glycogen synthase kinase-3)

264220-23-7 CAPLUS RN

1H-Pyrrole-2,5-dione, 3-(3-fluorophenyl)-4-[[2-(methylamino)-6-CN benzoxazolyl]amino]- (9CI) (CA INDEX NAME)

RN 264220-25-9 CAPLUS

CN 1H-Pyrrole-2,5-dione, 3-(2,3-difluorophenyl)-4-[[2-(methylamino)-6-benzoxazolyl]amino]- (9CI) (CA INDEX NAME)

L7 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER:

1998:682372 CAPLUS

DOCUMENT NUMBER:

129:316232

TITLE:

Preparation of compounds and compositions for

treating

diseases associated with serine protease,

particularly tryptase, activity

INVENTOR(S):

Church, Timothy J.; Cutshall, Neil Scott; Gangloff, Anthony R.; Jenkins, Thomas E.; Linsell, Martin S.; Litvak, Joane; Rice, Kenneth D.; Spencer, Jeffrey R.;

Wang, Vivian R.

PATENT ASSIGNEE(S):

Axys Pharmaceuticals Corporation, USA

SOURCE:

PCT Int. Appl., 108 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PAC | CENT       | NO. |     | KI          | ND  | DATE |      |     | A                        | PPLI | CATI | ON NO | DATE |      |      |     |     |  |  |
|-----|------------|-----|-----|-------------|-----|------|------|-----|--------------------------|------|------|-------|------|------|------|-----|-----|--|--|
|     |            |     |     |             |     |      |      |     | -                        |      |      |       |      |      |      |     |     |  |  |
| WO  | WO 9845275 |     |     | A1 19981015 |     |      |      |     | WO 1997-US21849 19971201 |      |      |       |      |      |      |     |     |  |  |
|     | W:         | AL, | AM, | ΑT,         | ΑU, | ΑZ,  | BA,  | BB, | BG,                      | BR,  | BY,  | CA,   | CH,  | CN,  | CU,  | CZ, | DE, |  |  |
|     |            | DK, | EE, | ES,         | FI, | GB,  | GE,  | GH, | HU,                      | ID,  | IL,  | IS,   | JP,  | ΚE,  | KG,  | ΚP, | KR, |  |  |
|     |            | KZ, | LC, | LK,         | LR, | LS,  | LT,  | LU, | LV,                      | MD,  | MG,  | MK,   | MN,  | MW,  | ΜX,  | NO, | NZ, |  |  |
|     |            | PL, | PT, | RO,         | RU, | SD,  | SE,  | SG, | SI,                      | SK,  | SL,  | ТJ,   | TM,  | TR,  | TT,  | UA, | ŬĠ, |  |  |
|     |            | US, | UZ, | VN,         | YU, | ZW,  | AM,  | AZ, | BY,                      | KG,  | ΚZ,  | MD,   | RU,  | ТJ,  | TM   |     |     |  |  |
|     | RW:        | GH, | KE, | LS,         | MW, | SD,  | SZ,  | ŪĠ, | ZW,                      | AT,  | BE,  | CH,   | DE,  | DK,  | ES,  | FI, | FR, |  |  |
|     |            | GB, | GR, | ΙE,         | IT, | LU,  | MC,  | NL, | PT,                      | SE,  | BF,  | ВJ,   | CF,  | CG,  | CI,  | CM, | GΑ, |  |  |
|     |            | GN, | ML, | MR,         | NE, | SN,  | TD,  | ТG  |                          |      |      |       |      |      |      |     |     |  |  |
| ΑU  | 9858       | 950 |     | A           | 1   | 1998 | 1030 |     | A                        | U 19 | 98-5 | 8950  |      | 1997 | 1201 |     |     |  |  |
| CN  | 1251       | 579 |     | Α           |     | 2000 | 0426 |     | C                        | N 19 | 97-1 | 8209  | 8    | 1997 | 1201 |     |     |  |  |
| ΕP  | 1019       | 382 |     | A           | 1   | 2000 | 0719 |     | E                        | P 19 | 97-9 | 5452  | 0    | 1997 | 1201 |     |     |  |  |
|     | R:         | AT, | BE, | CH,         | DE, | DK,  | ES,  | FR, | GB,                      | GR,  | IT,  | LI,   | LU,  | NL,  | SE,  | MC, | PT, |  |  |
|     |            | ΙE, | FI  | ·           | •   | •    | ·    | ·   | ·                        | ·    |      |       |      |      |      |     |     |  |  |

| JP 2001519806<br>NO 9904858<br>LV 12495<br>LT 4704<br>US 2001053779<br>PRIORITY APPLN. INFO.: | T2<br>A<br>B<br>B<br>A1 | 20011023<br>19991206<br>20010120<br>20000925<br>20011220 | US 19 | 2 1998-542739<br>5 1999-4858<br>7 1999-153<br>7 1999-131<br>5 2001-874412<br>997-833674<br>994-357491<br>997-980515 | 2<br>A<br>B2<br>A1 | 19971201<br>19991006<br>19991102<br>19991105<br>20010604<br>19970407<br>19941214<br>19971201 |
|---|-------------------------|--|-------|---|--------------------|--|
| OTHER SOURCE(S):  | CA                      | SREACT 129:3   |       | 997-US21849<br>MARPAT 129:  | •••                | 19971201<br>6232   |

OTHER SOURCE(S):

$$(R^2)_n +$$
 $(R^3)_n$ 
 $(R^3)_n$ 
 $(R^3)_n$ 

A preferred aspect of the invention are compds. of Formula [I; in which: AΒ the dashed lines independently represent optional bonds; each R2 independently is (C1-6)alkyl, (C1-6)alkyloxy, halo or hydroxy; each R3 independently is (C1-6) alkyl, (C1-6) alkyloxy, halo or hydroxy; X3 is -C(O) or -CR7R8-, X8 is -CH(R1)n1- or -C(R1)n1=, wherein R1 is amino(N1-4)azolidinyl, amino(N1-4)azolyl, (N1-4)azolidinyl, (N1-4)azolyl, etc.; X8 is -N= or -NH(R1)n1-, wherein R1 is -C(NR9)R9, -C(NH)NHR10 or -C(NH)NR10R10, wherein R9 independently is hydrogen or (C1-6)alkyl and each R10 independently is (C1-6)alkyl; and X9 is -CH(R4)- or -C(R4)=, wherein R4 is -R12, -OR12, -N(R13)R12, etc.; wherein R4 is -C(O)R12, -C(0)OR12, -C(0)N(R13)R12, etc.; R12 is cyano, guanidino, halo, alkyl, etc.; R13 is hydrogen, alkyl; R5 is hydrogen or (C1-4)alkyl, R6 is hydrogen or (C1-4) alkyl; R7 is hydrogen, methyl; R8 is hydrogen Me, hydroxy; n = 0-4]. The compds., compns. and methods are effective for the prevention and treatment of inflammatory diseases assocd. with the respiratory tract, such as asthma and allergic rhinitis, as well as other types of immunomediated inflammatory disorders, such as rheumatoid arthritis, conjunctivitis and inflammatory bowel disease, various dermatol. conditions, as well as certain viral conditions. The compds. comprise potent and selective inhibitors of the mast-cell protease tryptase. The compns. for treating these conditions include oral, inhalant, topical and parenteral prepns. as well as devices comprising such prepns.

#### ΙT 214781-81-4P

RN

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of arenoimidazoles for treating human inflammatory disorder) 214781-81-4 CAPLUS

1H-Benzimidazole-6-carboxamide, 2-[1-(4-amino-2-benzoxazolyl)ethyl]-N-[2-CN (2-methoxyphenoxy)ethyl]-1-methyl- (9CI) (CA INDEX NAME)

ANSWER 7 OF 10 CAPLUS COPYRIGHT 2001 ACS ACCESSION NUMBER: 1998:268348 CAPLUS 128:321662 DOCUMENT NUMBER: Compositions and methods for treating bone TITLE: deficit conditions Orme, Mark W.; Baindur, Nand; Robbins, Kirk G.; et INVENTOR(S): Zymogenetics, Inc., USA; Osteoscreen, Inc. PATENT ASSIGNEE(S): PCT Int. Appl., 215 pp. SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT:

APPLICATION NO. DATE PATENT NO. KIND DATE WO 9817267 A1 19980430 WO 1997-US18864 19971023 A1 WO 9817267 W: AL, AM, AU, BB, BG, BR, CA, CN, CZ, EE, FI, GE, HU, IL, IS, JP, KG, KP, KR, LK, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, S90169 A 19991123 US 1997-806771 US 5990169 US 6153631 Α 20001128 US 1997-806768 19970226 B1 20010626 US 6251901 US 1997-806769 19970226 Α 19990706 US 1997-808743 US 5919808 19970228 A US 1997-808742 US 5922753 19990713 19970228 A 19990907 A 19991130 US 5948776 US 1997-808739 19970228 US 5994358 US 1997-808744 19970228 Α US 5965573 19991012 US 1997-812141 19970306 AU 9749889 A1 19980515 AU 1997-49889 A1 20000126 EP 1997-912787 19971023 EP 1997-912787 EP 973513 19971023 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI JP 2001510450 T2 20010731 JP 1998-519529 19971023 US 1996-735870 A2 19961023 PRIORITY APPLN. INFO.: A2 19961023 US 1996-735873 A2 19961023 US 1996-735874 A2 19961023 US 1996-735876 A2 19961023 US 1996-735881 A2 19961023 US 1996-736220 US 1996-736221 A2 19961023 US 1996-736222 A2 19961023 US 1996-736228 A2 19961023 US 1996-736318 A2 19961023 US 1996-736319 A2 19961023 WO 1997-US18864 W 19971023

OTHER SOURCE(S):

GΙ

AB

PATENT INFORMATION:

Compds. contg. 2 covalently linked arom. systems, i.e. Ar1LAr2 [I; Ar1,

MARPAT 128:321662

Ar2 = (un)substituted Ph, naphthyl, or 5- or 6-membered arom.
heterocyclyl; L = linker (atoms or covalent bond per se) so as to space
the arom. systems at a distance of 1.5-15 .ANG.] are effective in
treating

conditions assocd. with bone deficits. The compds. can be administered to

vertebrate subjects alone or in combination with addnl. agents that promote bone growth or that inhibit bone resorption. They can be screened

for activity prior to administration by assessing their ability to effect the transcription of a reporter gene coupled to a promoter assocd. With a bone morphogenetic protein and/or their ability to stimulate calvarial growth in model animal systems. A variety of compds. Were prepd. and/or tested by high-throughput screening. For instance, title compd. II was prepd. by condensation of 2-chloro-5-(trifluoromethyl)pyridine with ethylenediamine in the presence of EtN(Pr-iso)2 at reflux. At 5-50 .mu.g/kg/day in ovariectomized rats, II stimulated bone growth with vol. increases of 21-71% obsd. In a calvarial bone growth assay, another compd. I induced a 4-fold increase in width of new calvarial bone vs. controls.

## IT 206983-85-9P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. and/or use of linked arom. and heteroarom. compds. for treating

bone deficit conditions)

RN 206983-85-9 CAPLUS

CN 2-Quinolinecarboxamide, N-2-benzothiazolyl- (9CI) (CA INDEX NAME)

IT 206982-80-1 206982-81-2 206982-92-5

206982-96-9 206982-97-0 206982-98-1

206982-99-2 206983-63-3 206983-64-4

206983-65-5 206983-66-6

RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(prepn. and/or use of linked arom. and heteroarom. compds. for treating  $% \left( \frac{1}{2}\right) =\frac{1}{2}\left( \frac{1}{2}\right) +\frac{1}{2}\left( \frac{1}{2}\right) +\frac{1$ 

bone deficit conditions)

RN 206982-80-1 CAPLUS

CN 2-Benzothiazoleacetonitrile, .alpha.-[(4-cyanophenyl)methylene]-, (.alpha.E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 206982-81-2 CAPLUS

CN 2-Benzothiazoleacetonitrile, .alpha.-[(2,3-dichlorophenyl)methylene]-,

(.alpha.E) - (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 206982-92-5 CAPLUS

CN Benzamide, N-2-benzothiazolyl-2-hydroxy-4-(methylthio)- (9CI) (CA INDEX NAME)

RN 206982-96-9 CAPLUS

CN Benzamide, N-2-benzothiazolyl-2-hydroxy-4-methoxy- (9CI) (CA INDEX NAME)

RN 206982-97-0 CAPLUS

CN Benzamide, N-2-benzothiazolyl-2-chloro-3,4-dimethoxy- (9CI) (CA INDEX NAME)

RN 206982-98-1 CAPLUS

CN Benzamide, N-2-benzothiazolyl-2-chloro-4,5-dimethoxy- (9CI) (CA INDEX NAME)

RN 206982-99-2 CAPLUS CN Benzamide, N-2-benzothiazolyl-4-(trifluoromethoxy)- (9CI) (CA INDEX NAME)

RN 206983-63-3 CAPLUS

CN Benzamide, N-2-benzothiazolyl-2,3,4-trimethoxy- (9CI) (CA INDEX NAME)

RN 206983-64-4 CAPLUS

CN Benzamide, N-2-benzothiazolyl-2,4,5-trimethoxy- (9CI) (CA INDEX NAME)

RN 206983-65-5 CAPLUS

CN Benzamide, N-2-benzothiazolyl-3,4,5-trimethoxy- (9CI) (CA INDEX NAME)

RN 206983-66-6 CAPLUS

CN Benzamide, N-2-benzothiazolyl-4-chloro-2-methoxy- (9CI) (CA INDEX NAME)

IT 190437-16-2 190437-54-8 190437-57-1

190437-79-7 190437-80-0 190437-88-8

190437-89-9 190437-92-4 190437-93-5

RL: BAC (Biological activity or effector, except adverse); THU

(Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of (hetero)arom. compds. for treating bone deficit conditions)
RN 190437-16-2 CAPLUS

CN Benzoic acid, 3-methyl-, 4-[(2-benzothiazolylamino)carbonyl]phenyl ester (9CI) (CA INDEX NAME)

RN 190437-54-8 CAPLUS

CN 4H-3,1-Benzothiazin-2-amine, N-(4-pyridinylmethyl)- (9CI) (CA INDEX NAME)

RN 190437-57-1 CAPLUS

CN Benzamide, N-2-benzothiazolyl-2-methoxy-4-(methylthio)- (9CI) (CA INDEX NAME)

RN 190437-79-7 CAPLUS

CN Benzamide, N-2-benzothiazolyl-2,4-dimethoxy- (9CI) (CA INDEX NAME)

RN 190437-80-0 CAPLUS

CN Benzamide, N-2-benzothiazolyl-2-methoxy-4-nitro- (9CI) (CA INDEX NAME)

RN 190437-88-8 CAPLUS CN Benzamide, N-2-benzothiazolyl-2,4-dichloro- (9CI) (CA INDEX NAME)

RN 190437-89-9 CAPLUS

CN Benzamide, N-2-benzothiazolyl-3,4-dichloro- (9CI) (CA INDEX NAME)

RN 190437-92-4 CAPLUS

CN Benzamide, N-2-benzothiazolyl-2,4,6-trimethoxy- (9CI) (CA INDEX NAME)

RN 190437-93-5 CAPLUS

CN Benzamide, N-2-benzothiazolyl-2-chloro-4-methoxy- (9CI) (CA INDEX NAME)

L7 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1997:603437 CAPLUS

DOCUMENT NUMBER: 127:248392

TITLE: Orally Active Trifluoromethyl Ketone Inhibitors of

Human Leukocyte Elastase

AUTHOR(S): Veale, Chris A.; Bernstein, Peter R.; Bohnert,

Claudia

M.; Brown, Frederick J.; Bryant, Craig; Damewood,

James R., Jr.; Earley, Roger; Feeney, Scott W.; Edwards, Philip D.; Gomes, Bruce; Hulsizer, James M.;

Kosmider, Ben J.; Krell, Robert D.; Moore, Gary; Salcedo, Theodora W.; Shaw, Andrew; Silberstein,

David

S.; Steelman, Gary B.; Stein, Mark; Strimpler, Anne; Thomas, Roy M.; Vacek, Edward P.; Williams, Joseph

C.;

Wolanin, Donald J.; Woolson, Sheila

CORPORATE SOURCE: Departments of Medicinal Chemistry Drug Disposition

and Metabolism and Pharmacology, ZENECA Pharmaceuticals, Wilmington, DE, 19897, USA

SOURCE: J. Med. Chem. (1997), 40(20), 3173-3181 CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE:

American Chemical Society
Journal

LANGUAGE: English

Pr-i NH CF3

This paper describes the development of a series of peptidyl trifluoromethyl ketone inhibitors of human leukocyte elastase which are found to have excellent pharmacol. profiles. **Methods** have been developed that allow for the synthesis of these inhibitors in stereochem. pure form. Two of these compds., I [R1 = p-anisyl or MeO (11)], have

high
levels of oral bioavailability in several species. Compd. 11 has entered
development as ZD8321 and is presently undergoing clin. evaluation.

These

compds. demonstrate that peptidyl trifluoromethyl ketone inhibitors can achieve high levels of oral activity and bioavailability, and therefore they may prove useful as therapeutic agents in the **treatment** of **diseases** in which elastase is implicated.

IT 195727-51-6P 195727-52-7P 195727-53-8P 195727-54-9P 195727-56-1P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. of peptidyl trifluoromethyl ketone inhibitors of human leukocyte elastase)

RN 195727-51-6 CAPLUS

CN L-Prolinamide,

N-(phenoxycarbonyl)-L-valyl-N-[(1S)-1-[[6-(methoxycarbonyl)-2-benzoxazolyl]carbonyl]-2-methylpropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 195727-52-7 CAPLUS

CN L-Prolinamide, N-[(phenylmethoxy)carbonyl]-L-valyl-N-[(1S)-1-[[7-(methoxycarbonyl)-2-benzoxazolyl]carbonyl]-2-methylpropyl]- (9CI) (CFINDEX NAME)

Absolute stereochemistry.

RN 195727-53-8 CAPLUS
CN L-Prolinamide, N-(4-methoxybenzoyl)-L-valyl-N-[(1S)-1-[[7-(methoxycarbonyl)-2-benzoxazolyl]carbonyl]-2-methylpropyl]- (9CI) (CFINDEX NAME)

Absolute stereochemistry.

RN 195727-54-9 CAPLUS

CN L-Prolinamide,

 $\begin{tabular}{ll} N-(4-methoxybenzoyl)-L-valyl-N-[(1S)-1-[[7-(acetylamino)-2-benzoxazolyl]carbonyl]-2-methylpropyl]-(9CI) (CA INDEX NAME) \\ \end{tabular}$ 

Absolute stereochemistry.

RN 195727-56-1 CAPLUS

CN L-Prolinamide,

N-(phenoxycarbonyl)-L-valyl-N-[(1S)-1-[[7-(methoxycarbonyl)-2-benzoxazolyl]carbonyl]-2-methylpropyl]- (9CI) (CA INDEX NAME)

ANSWER 9 OF 10 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER:

1997:564948 CAPLUS

DOCUMENT NUMBER:

127:161818

TITLE:

Preparation of benzoxazole or pyridine derivatives as

agonists of PPAR.alpha. and PPAR.gamma. for the

treatment of Syndrome X

INVENTOR(S): PATENT ASSIGNEE(S): Smith, Stephen Alistair

Smithkline Beecham P.L.C., UK; Smith, Stephen

Alistair SOURCE:

PCT Int. Appl., 42 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE: FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PA      | PATENT NO. |       |     |     |     | KIND DATE |      |               |    |      | ICAT |       |      |      |      |     |     |
|---------|------------|-------|-----|-----|-----|-----------|------|---------------|----|------|------|-------|------|------|------|-----|-----|
| WC      | 9725       | 042   |     |     |     | 19970717  |      |               |    |      |      |       | 0107 |      |      |     |     |
|         | w:         | AL,   | AM, | AT, | ΑU, | ΑZ,       | BA,  | BB,           | BG | , BR | , BY | , CA, | CH,  | CN,  | CU,  | CZ, | DE, |
|         |            |       |     |     |     |           |      |               |    |      |      | , KE, |      |      |      |     |     |
|         |            |       |     |     |     |           |      |               |    |      |      | , MW, |      |      |      |     |     |
|         |            |       |     |     |     |           |      |               |    |      |      | , TT, |      |      |      |     |     |
|         |            |       |     |     |     | ΚZ,       |      |               |    |      |      |       |      |      |      |     |     |
|         | RW:        |       |     |     |     |           |      |               |    |      |      | , DK, | ES,  | FI,  | FR,  | GB, | GR, |
|         |            |       |     |     |     |           |      |               |    |      |      | , CG, |      |      |      |     |     |
|         |            |       | NE, |     |     |           |      | ·             |    | •    | •    |       |      |      |      |     |     |
| CA      | 2242       |       |     |     |     |           | 0717 |               |    | CA 1 | 997- | 22426 | 32   | 1997 | 0107 |     |     |
|         |            |       |     |     |     |           |      | AU 1997-14397 |    |      |      |       |      |      |      |     |     |
|         | 8790       |       |     |     |     |           |      |               |    |      |      |       |      |      |      |     |     |
|         |            |       |     |     |     |           |      |               |    |      |      | , LI, |      |      |      | MC, | PT, |
|         |            | •     | SI, |     |     | •         | •    | •             |    | •    | •    |       |      |      |      |     | •   |
| CN      | 1212       |       |     |     |     | 1999      | 0331 |               |    | CN 1 | 997- | 19271 | 1    | 1997 | 0107 |     |     |
|         | 9706       |       |     |     |     | 1999      |      |               |    |      |      | 6968  |      |      |      |     |     |
|         | 2000       |       |     |     |     | 2000      | 0328 |               |    | JP 1 | 997- | 52485 | 5    | 1997 | 0107 |     |     |
|         | 9700       |       |     |     |     | 1998      | 0724 |               |    | ZA 1 | 997- | 171   |      | 1997 | 0109 |     |     |
|         | 9803       |       |     |     |     | 1998      |      |               |    |      |      | 3147  |      |      |      |     |     |
|         | 6166       |       |     |     |     | 2000      | 1226 |               |    | US 1 | 998- | 10131 | 6    | 1998 | 0910 |     |     |
| PRIORIT |            |       |     |     |     |           |      |               |    |      |      |       |      |      |      |     |     |
|         |            |       |     | - • |     |           |      |               |    |      |      | 8     |      |      |      |     |     |
| OTHER S | OURCE      | (5) . |     |     | MAR | PAT       | 127: |               |    | ·    |      |       |      |      |      |     |     |

OTHER SOURCE(S): MARPAT 127:161818

GI

$$\begin{array}{c|c} \text{CO}_2\text{H} \\ \hline \text{OCH}_2\text{R}1 \\ \hline \end{array}$$

I (R = 2-benzoxazolyl, 2-pyridyl; R1 = CH2OMe, CF3) were prepd. for treatment and/or prophylaxis of Syndrome X in a human or non-human mammal, which method comprises the administration of an effective, nontoxic and pharmaceutically effective amt. of an agonist of PPAR.alpha. and PPAR.gamma.. E.g., treating [2S,N(1S)]-3-[4-[2-[N-(2-benzoxazolyl)-N-methylamino]ethoxy]phenyl]-2-(2-methoxyethoxy)-N-(2-hydroxy-1-phenylethyl)propanamide with H2SO4 in aq. dioxane gave (S)-3-[4-[2-[N-(2-benzoxazolyl)-N-methylamino]ethoxy]phenyl]-2-(2-methoxyethoxy)propanoic acid. Agonist effects of I at human PPAR.alpha. and PPAR.gamma. were assessed.

IT 177785-16-9P 177785-17-0P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of benzoxazole or pyridine derivs. as agonists of PPAR.alpha. and PPAR.gamma.)

RN 177785-16-9 CAPLUS

CN Benzenepropanoic acid,

4-[2-(2-benzoxazolylmethylamino)ethoxy]-.alpha.-(2-methoxyethoxy)-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 177785-17-0 CAPLUS

CN Benzenepropanoic acid, 4-[2-(2-benzoxazolylmethylamino)ethoxy]-.alpha.- (2,2,2-trifluoroethoxy)-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

## IT 193559-09-0P

RL: BYP (Byproduct); PREP (Preparation)
 (prepn. of benzoxazole or pyridine derivs. as agonists of PPAR.alpha.
 and PPAR.gamma.)

RN 193559-09-0 CAPLUS

CN Benzenepropanamide, 4-[2-(2-benzoxazolylmethylamino)ethoxy]-N-[(1S)-2-hydroxy-1-phenylethyl]-.alpha.-(2,2,2-trifluoroethoxy)-, (.alpha.R)-(9CI)

(CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

CN Benzenepropanoic acid,
4-[2-(2-benzoxazolylmethylamino)ethoxy]-.alpha.-(2methoxyethoxy)- (9CI) (CA INDEX NAME)

RN 177785-19-2 CAPLUS
CN Benzenepropanoyl chloride,
4-[2-(2-benzoxazolylmethylamino)ethoxy]-.alpha.(2-methoxyethoxy)- (9CI) (CA INDEX NAME)

RN 177785-20-5 CAPLUS

CN Benzenepropanamide, 4-[2-(2-benzoxazolylmethylamino)ethoxy]-N-[(1S)-2-hydroxy-1-phenylethyl]-.alpha.-(2-methoxyethoxy)-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 177785-22-7 CAPLUS

CN Benzenepropanoyl chloride,

4-[2-(2-benzoxazolylmethylamino)ethoxy]-.alpha.-(2,2,2-trifluoroethoxy)- (9CI) (CA INDEX NAME)

RN 177785-23-8 CAPLUS

CN Benzenepropanamide, 4-[2-(2-benzoxazolylmethylamino)ethoxy]-N-[(1S)-2-hydroxy-1-phenylethyl]-.alpha.-(2,2,2-trifluoroethoxy)-, (.alpha.S)(9CI)

(CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 177785-25-0 CAPLUS
CN 2-Oxazolidinone,
3-[(2S,3R)-3-[4-[2-(2-benzoxazolylmethylamino)ethoxy]phen
yl]-3-hydroxy-1-oxo-2-(2,2,2-trifluoroethoxy)propyl]-4-(phenylmethyl)-,
(4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

Absolute stereochemistry. Rotation (+).

RN 177785-27-2 CAPLUS
CN Benzenepropanoic acid, 4-[2-(2-benzoxazolylmethylamino)ethoxy]-.alpha.(2,2,2-trifluoroethoxy)-, methyl ester, (.alpha.S)- (9CI) (CA INDEX
NAME)

Absolute stereochemistry. Rotation (-).

RN 177785-29-4 CAPLUS
CN 2-Oxazolidinone,
3-[(2S,3R)-3-[4-[2-(2-benzoxazolylmethylamino)ethoxy]phen
yl]-3-hydroxy-2-(2-methoxyethoxy)-1-oxopropyl]-4-(phenylmethyl)-, (4S)(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 177785-30-7 CAPLUS
CN 2-Oxazolidinone,
3-[(2S)-3-[4-[2-(2-benzoxazolylmethylamino)ethoxy]phenyl]2-(2-methoxyethoxy)-1-oxopropyl]-4-(phenylmethyl)-, (4S)- (9CI) (CA
INDEX
NAME)

Absolute stereochemistry. Rotation (+).

RN 177785-31-8 CAPLUS
CN Benzenepropanoic acid,
4-[2-(2-benzoxazolylmethylamino)ethoxy]-.alpha.-(2methoxyethoxy)-, methyl ester, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

IT 177785-21-6P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of benzoxazole or pyridine derivs. as agonists of PPAR.alpha.
 and PPAR.gamma.)

RN 177785-21-6 CAPLUS

CN Benzenepropanoic acid, 4-[2-(2-benzoxazolylmethylamino)ethoxy]-.alpha.- (2,2,2-trifluoroethoxy)- (9CI) (CA INDEX NAME)

L7 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1997:397336 CAPLUS

DOCUMENT NUMBER: 127:17703

TITLE: Preparation of (hetero) aromatic compounds for

treating

bone deficit conditions.

INVENTOR(S): Petrie, Charles; Orme, Mark W.; Baindur, Nand;

Robbins, Kirk G.; Harris, Scott M.; Kontoyianni, Maria; Hurley, Laurence H.; Kerwin, Sean M.; Mundy,

Gregory R.

PATENT ASSIGNEE(S): Zymogenetics, Inc., USA; Osteoscreen, Inc.;

University

of Texas At Austin
SOURCE: PCT Int. Appl., 99 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO. KIND |               |     |     |     |     | DATE |      |     | A   | PPLI | CATI | и ис | э.  | DATE     |     |     |     |  |
|-----------------|---------------|-----|-----|-----|-----|------|------|-----|-----|------|------|------|-----|----------|-----|-----|-----|--|
|                 |               |     |     |     |     |      |      |     |     |      |      |      |     |          |     |     |     |  |
| WO              | WO 9715308 A1 |     |     |     |     | 1997 | 0501 |     | W   | 19:  | 96-U | s170 | 19  | 19961023 |     |     |     |  |
|                 | W:            | AL, | AM, | ΑU, | BA, | BB,  | BG,  | BR, | CA, | CN,  | CU,  | CZ,  | EE, | FI,      | GE, | ΗU, | IL, |  |
|                 |               | IS, | JP, | KG, | ΚP, | KR,  | LC,  | LK, | LR, | LT,  | LV,  | MD,  | MG, | MK,      | MN, | MX, | NO, |  |
|                 |               | ΝZ, | PL, | RO, | SG, | SI,  | SK,  | TR, | TT, | UA,  | UΖ,  | VN,  | AM, | ΑZ,      | BY, | KG, | ΚZ, |  |
|                 |               | MD, | RU, | ТJ, | TM  |      |      |     |     |      |      |      |     |          |     |     |     |  |
|                 | RW:           | ΚE, | LS, | MW, | SD, | SZ,  | ŪG,  | AT, | BE, | CH,  | DE,  | DK,  | ES, | FI,      | FR, | GB, | GR, |  |

IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG 19970501 CA 1996-2235481 19961023 AΑ CA 2235481 AU 1996-74710 19961023 AU 9674710 Α1 19970515 AU 706262 19990610 B2 EP 1996-936906 19961023 19980930 EP 866710 Α1 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI CN 1996-197827 19961023 19981209 CN 1201393 BR 1996-11210 19961023 BR 9611210 Α 19991228 19961023 JP 1997-516761 Т2 20001010 JP 2000513324 US 1997-878868 19970619 US 6008208 А 19991228 NO 1998-1810 19980422 NO 9801810 Α 19980622 P 19951023 PRIORITY APPLN. INFO.: US 1995-5830 B1 19961023 US 1996-735875 WO 1996-US17019 W 19961023

OTHER SOURCE(S):

MARPAT 127:17703

GΤ

AB A method for treating deficient bone growth and/or undesirable bone resorption comprises administration of compds. comprising 2 (substituted) arom. systems spaced apart by a linker of 1.5-15 .ANG., is claimed. Thus, dithizone was refluxed in EtOH/HOAc for 18 h to give 25% title compd. (I). In a calvarial bone growth assay, I induced a 4-fold increase in width of new calvarial bone vs. controls.

IT 190437-16-2 190437-54-8 190437-57-1 190437-79-7 190437-80-0 190437-88-8 190437-89-9 190437-92-4 190437-93-5

RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(prepn. of (hetero)arom. compds. for treating bone deficit conditions)

RN 190437-16-2 CAPLUS

CN Benzoic acid, 3-methyl-, 4-[(2-benzothiazolylamino)carbonyl]phenyl ester (9CI) (CA INDEX NAME)

RN 190437-54-8 CAPLUS

CN 4H-3,1-Benzothiazin-2-amine, N-(4-pyridinylmethyl)- (9CI) (CA INDEX NAME)

RN 190437-57-1 CAPLUS

CN Benzamide, N-2-benzothiazolyl-2-methoxy-4-(methylthio)- (9CI) (CA INDEX NAME)

RN 190437-79-7 CAPLUS

CN Benzamide, N-2-benzothiazolyl-2,4-dimethoxy- (9CI) (CA INDEX NAME)

RN 190437-80-0 CAPLUS

CN Benzamide, N-2-benzothiazolyl-2-methoxy-4-nitro- (9CI) (CA INDEX NAME)

RN 190437-88-8 CAPLUS

CN Benzamide, N-2-benzothiazolyl-2,4-dichloro- (9CI) (CA INDEX NAME)

RN 190437-89-9 CAPLUS

CN Benzamide, N-2-benzothiazolyl-3,4-dichloro- (9CI) (CA INDEX NAME)

RN 190437-92-4 CAPLUS

CN Benzamide, N-2-benzothiazolyl-2,4,6-trimethoxy- (9CI) (CA INDEX NAME)

RN 190437-93-5 CAPLUS

CN Benzamide, N-2-benzothiazolyl-2-chloro-4-methoxy- (9CI) (CA INDEX NAME)

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| CA SUBSCRIBER PRICE                        | ENTRY<br>-7.06      | -7.06            |

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                  TOXLINE no longer being updated
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                  DWPI and DPCI
                  In-process records and more frequent updates now in
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                  MEDLINE
                  PAGE IMAGES FOR 1947-1966 RECORDS IN CAPLUS AND CA
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                  to PHARMASEARCH
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         Oct 09
                  Korean abstracts now included in Derwent World Patents
                  Index
NEWS 15 Oct 09
                  Number of Derwent World Patents Index updates increased
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                 Calculated properties now in the REGISTRY/ZREGISTRY File
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NEWS 18 Oct 22 DGENE GETSIM has been improved NEWS 19 Oct 29 AAASD no longer available
NEWS 20 Nov 19 New Search Capabilities USPATFULL and USPAT2
                 TOXCENTER(SM) - new toxicology file now available on STN
NEWS 21 Nov 19
NEWS 22 Nov 29 COPPERLIT now available on STN
NEWS 23 Nov 29 DWPI revisions to NTIS and US Provisional Numbers NEWS 24 Nov 30 Files VETU and VETB to have open access
NEWS 25 Dec 10 WPINDEX/WPIDS/WPIX New and Revised Manual Codes for 2002
NEWS 26 Dec 10 DGENE BLAST Homology Search
NEWS 27 Dec 17 WELDASEARCH now available on STN
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                 STANDARDS now available on STN
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Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

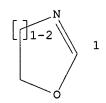
Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

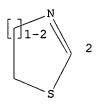
=> Uploading 530807b.str

L1 STRUCTURE UPLOADED

=> d

L1 HAS NO ANSWERS L1 STR





G1 C, N G2 [@1], [@2]

Structure attributes must be viewed using STN Express query preparation.

=> s 11 sss sam

SAMPLE SEARCH INITIATED 17:11:11 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 55628 TO ITERATE

8 ANSWERS 1.8% PROCESSED 1000 ITERATIONS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*INCOMPLETE\*\*
BATCH \*\*INCOMPLETE\*\*

PROJECTED ITERATIONS: EXCEEDS 1000000

PROJECTED ANSWERS: EXCEEDS 7635

L2 8 SEA SSS SAM L1

=> s l1 full

FULL SEARCH INITIATED 17:11:17 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - >1,000,000 TO ITERATE

< 19.4% PROCESSED 193776 ITERATIONS

< 40.0% PROCESSED 400000 ITERATIONS 3544 ANSWERS

1682 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.43

FULL FILE PROJECTIONS: ONLINE \*\*INCOMPLETE\*\*

BATCH \*\*INCOMPLETE\*\*

EXCEEDS 1000000 PROJECTED ITERATIONS:

EXCEEDS 9544 PROJECTED ANSWERS:

3544 SEA SSS FUL L1 L3

=> fil caplus

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST 134.49 134.64 FILE 'CAPLUS' ENTERED AT 17:12:06 ON 27 DEC 2001 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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FILE COVERS 1907 - 27 Dec 2001 VOL 135 ISS 26 FILE LAST UPDATED: 26 Dec 2001 (20011226/ED)

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=> s 13 full

L4 821 L3

=> s 14 and diseases?

152528 DISEASES?

L5 33 L4 AND DISEASES?

=> s 15 and method?

2935163 METHOD?

L6 0 L5 AND METHOD?

 $\Rightarrow$  d 15 1-10 ibib abs hitstr

L5 ANSWER 1 OF 33 CAPLUS COPYRIGHT 2001 ACS ACCESSION NUMBER: 2001:791912 CAPLUS

DOCUMENT NUMBER: 135:344503

TITLE: Preparation of imidazopyrimidines and

triazolopyrimidines as inhibitors of Syk tyrosine

kinase

INVENTOR(S): Yura, Takeshi; Conception, Arnel B.; Hahn, Kyun Hee;

Hiraoka, Makiko; Katsumada, Hiroko; Kawamura,

Norihiro; Kokubo, Toshio; Komura, Hiroshi; Lee, Young Ho; Lowinger, Timothy B.; Motegi, Munehito; Yamamoto,

Tomoyuki; Yoshida, Osahiro

PATENT ASSIGNEE(S): Bayer A.-G., Germany

SOURCE: Jpn. Kokai Tokkyo Koho, 212 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

LANGUAGE:

Patent Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PA      | PATENT NO. |            |      | KI          | KIND DATE |      |               |     | A             | PPLI           | CATI | ο.       | DATE |            |     |     |     |  |
|---------|------------|------------|------|-------------|-----------|------|---------------|-----|---------------|----------------|------|----------|------|------------|-----|-----|-----|--|
|         |            |            |      |             |           |      |               |     | _             |                |      |          |      |            |     |     |     |  |
| JP      | 2001302667 |            |      | A2 20011031 |           |      | JP 2000-12887 |     |               |                |      | 20000428 |      |            |     |     |     |  |
| WO      | 2001       | 2001083485 |      |             | 1         | 2001 | 1108          |     | WO 2001-EP435 |                |      |          |      | 7 20010417 |     |     |     |  |
|         | W:         | ΑE,        | AG,  | AL,         | AM,       | ΑT,  | ΑU,           | ΑZ, | BA,           | BB,            | ВG,  | BR,      | BY,  | ΒZ,        | CA, | CH, | CN, |  |
|         |            | co,        | CR,  | CU,         | CZ,       | DE,  | DK,           | DM, | DZ,           | EE,            | ES,  | FI,      | GB,  | GD,        | GE, | GH, | GM, |  |
|         |            | HR,        | ΗU,  | ID,         | IL,       | IN,  | IS,           | JP, | KΕ,           | KG,            | ΚP,  | KR,      | ΚZ,  | LC,        | LK, | LR, | LS, |  |
|         |            | LT,        | LU,  | LV,         | MA,       | MD,  | MG,           | MK, | MN,           | MW,            | MX,  | MZ,      | NO,  | ΝZ,        | PL, | PT, | RO, |  |
|         |            | RU,        | SD,  | SE          |           |      |               |     |               |                |      |          |      |            |     |     |     |  |
|         | RW:        | GH,        | GM,  | ΚE,         | LS,       | MW,  | MZ,           | SD, | SL,           | SZ,            | TZ,  | UG,      | ŻW,  | AT,        | ΒE, | CH, | CY, |  |
|         |            | DE,        | DK,  | ES,         | FI,       | FR,  | GB,           | GR, | ΙĖ,           | ΙT,            | LU,  | MC,      | NL,  | PT,        | SE, | TR, | BF, |  |
|         |            | ВJ,        | CF,  | CG,         | CI,       | CM,  | GΑ,           | GN, | GW,           | ML,            | MR,  | ΝĖ,      | SN,  | TD,        | TG  |     |     |  |
| PRIORIT | Y APP      | LN.        | INFO | .:          |           |      |               |     | JP 2          | JP 2000-128870 |      |          |      | A 20000428 |     |     |     |  |
| OTHER S |            | MAR        | PAT  | 135:        | 3445      | 03   |               |     |               |                |      |          |      |            |     |     |     |  |
| GI      |            |            |      |             |           |      |               |     |               |                |      |          |      |            |     |     |     |  |

$$\begin{array}{c|c}
 & R^1 \\
 & N \\
 & R^2 \\
 & N \\
 & R^3 \\
 & I
\end{array}$$

AB The title compds. [I; R1 = X-R4, (un)substituted 4- to 5-membered (un)satd. heterocyclyl contg. .ltoreq.4 heteroatoms selected from O, N, and S, 4 to 7-membered (un)satd. carbocyclyl, 7 to 10-membered (un)satd. condensed ring moiety optionally contg. .ltoreq.4 heteroatoms selected from O, N, and S [wherein X = (un)substituted CH2, O, S, SO, SO2, (un)substituted NH; R4 = (un)substituted C7-10 aroyl, C7-10 aralkyl, C1-10

alkyl, C2-10 alkenyl, C3-7 (un)satd. carbocyclyl, 4 to 7-membered (un)satd. heterocyclyl contg. .ltoreq.4 heteroatoms selected from O, N, and S, 7 to 10-membered (un)satd. condensed ring moiety optionally contg. .ltoreq.4 heteroatoms selected from O, N, and S]; Y = CH, N; R2 = H, (un)substituted C1-10 alkyl, NR8COR9, NR8CO2R9, COR8, CO2R9, CONR8R9 [wherein R8, R9 = H, (un)substituted C1-6 alkyl]; R3 = (un)substituted aryl or heteroaryl] or salts thereof are prepd. These compds. are useful as antiallergic agent for the prevention or treatment of asthma, allergic rhinitis, atopic dermatitis, food allergy, contact allergy, hives, conjunctivitis, and vernal (spring) catarrh, or as immunosuppressants, anticoagulants, or antitumor agents. Thus, 5-chloro-7-(3,4-dimethoxyphenyl)imidazo[1,2-c]pyrimidine, 1-(4-fluorophenyl)piperazine dihydrochloride, diisopropylethylamine, and 2-propanol were heated at 90.degree. with stirring to give 64.6% 7-(3,4-dimethoxyphenyl)-5-[4-(4-fluorophenyl)piperazin-1-yl]imidazo[1,2-c]pyrimidine which showed IC50 of .ltoreq.0.5 .mu.M against Syk tyrosine kinase.

IT 371167-79-2P

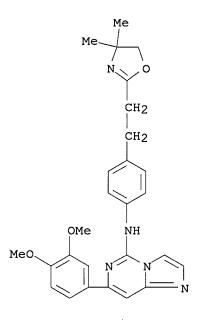
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of imidazopyrimidines and triazolopyrimidines as inhibitors of Syk tyrosine kinase, immunosuppressants, anticoagulants, antitumor agents, or antiallergic agents)

RN 371167-79-2 CAPLUS

CN

Imidazo[1,2-c]pyrimidin-5-amine, N-[4-[2-(4,5-dihydro-4,4-dimethyl-2oxazolyl)ethyl]phenyl]-7-(3,4-dimethoxyphenyl)- (9CI) (CA INDEX NAME)



L5 ANSWER 2 OF 33 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: DOCUMENT NUMBER:

2001:631913 CAPLUS

TITLE:

Preparation of azolylphenyl oxamides as inosine

monophosphate dehydrogenase (IMPDH) inhibitors

INVENTOR(S):

Broadhurst, Michael John; Hill, Christopher Huw; Hurst, David Nigel; Jones, Philip Stephen; Kay, Paul Brittain; Kilford, Ian Reginald; Mckinnell, Robert

Murray

PATENT ASSIGNEE(S):

F. Hoffmann-La Roche A.-G., Switz.

SOURCE:

LANGUAGE:

Eur. Pat. Appl., 256 pp.

CODEN: EPXXDW

135:195556

DOCUMENT TYPE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO.           | KIND    | DATE     | APPLICATION NO.        | DATE              |  |  |  |  |  |
|----------------------|---------|----------|------------------------|-------------------|--|--|--|--|--|
|                      |         | <b></b>  |                        |                   |  |  |  |  |  |
| EP 1127883           | A2      | 20010829 | EP 2001-103521         | 20010216          |  |  |  |  |  |
| R: AT, BE,           | CH, DE, | DK, ES,  | FR, GB, GR, IT, LI, LU | , NL, SE, MC, PT, |  |  |  |  |  |
| IE, SI,              | LT, LV, | FI, RO   |                        |                   |  |  |  |  |  |
| CN 1310179           | A       | 20010829 | CN 2001-104906         | 20010223          |  |  |  |  |  |
| JP 2001261663        | A2      | 20010926 | JP 2001-51064          | 20010226          |  |  |  |  |  |
| PRIORITY APPLN. INFO | .:      |          | GB 2000-4392 A         | 20000224          |  |  |  |  |  |
|                      |         |          | GB 2000-15877 A        | 20000628          |  |  |  |  |  |
|                      |         |          | GB 2000-20322 A        | 20000817          |  |  |  |  |  |

OTHER SOURCE(S): MARPAT 135:195556

GI

AB Title compds. (I; R1 = heterocyclyl; R2 = H, alkyl, alkoxy, halo, OH, cyano; R3 = H, alkyl, alkoxy, halo, cyano; R4 = H, alkyl, cycloalkyl, aryl, heterocyclyl; R5 = H, alkyl, alkoxy, halo, cyano; R6 = H, alkyl, alkoxy, halo, cyano; R7, R8 = H, alkyl; R4R8N = heterocyclyl), were prepd.

Ι

Thus, 1,1-dimethyl-3-(4-nitrophenoxy)propylamine (prepn. given) was coupled with N-[3-methoxy-4-(5-oxazolyl)phenyl]oxamic acid in the presence

of 1-(3-dimethylaminopropyl)-3-ethylcarbodiimide and 1-hydroxy-7-azabenzotriazole to give N-[3-methoxy-4-(5-oxazolyl)phenyl]-N'-[1,1-dimethyl-3-(4-nitrophenoxy)propyl]oxalamide. Tested I inhibited IMPDH with IC50 = 0.010-0.277 .mu.M. I can be used for treating immune mediated

conditions or **diseases**, viral **diseases**, bacterial **diseases**, parasitic **diseases**, inflammation, inflammatory **diseases**, hyperproliferative vascular **diseases**, tumors, and cancer.

IT 357183-66-5P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

 $\hbox{(prepn. of azolylphenyl oxamides as inosine monophosphate} \\ \hbox{dehydrogenase}$ 

(IMPDH) inhibitors)

RN 357183-66-5 CAPLUS

CN Ethanediamide, N-(4,5-dihydro-2-thiazolyl)-N'-[3-methoxy-4-(5-oxazolyl)phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} MeO & O & O \\ \parallel & \parallel & \parallel \\ \hline NH-C-C-NH-S & \\ \end{array}$$

L5 ANSWER 3 OF 33 CAPLUS COPYRIGHT 2001 ACS ACCESSION NUMBER: 2001:526075 CAPLUS

DOCUMENT NUMBER: 135:122506

TITLE: Preparation of 2-amino-2-(aryl or

heteroaryl)propanoic

acid derivatives and related compounds as

non-peptidyl

inhibitors of VLA-4 dependent cell binding useful in treating inflammatory, autoimmune, and respiratory

diseases

INVENTOR(S): Chupak, Louis Stanley; Duplantier, Allen Jacob; Lau,

Wan Fang; Milici, Anthony John

PATENT ASSIGNEE(S): Pfizer Products Inc., USA SOURCE: PCT Int. Appl., 182 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

English LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

APPLICATION NO. DATE PATENT NO. KIND DATE WO 2001051487 A1 20010719 WO 2000-IB1893 20001215 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG US 1999-173260 P 19991228 PRIORITY APPLN. INFO.: MARPAT 135:122506

OTHER SOURCE(S):

GΙ

$$R^{4}$$
 $R^{-}(CH_{2})n-Y$ 
 $R^{2}$ 
 $R^{3}$ 
 $E^{-}(CH_{2})m^{-}(CR^{7}R^{8})p^{-}CO_{2}H$ 

There is disclosed a genus of non-peptidyl compds. represented by formula AB A-(CH2)n-Y-N(R4)-CR2R3-B-E-(CH2)m-(CR7R8)p-CO2H [A is (un) substituted C1-C6 alkyl, cycloalkyl, aryl, heteroaryl or heterocyclyl, A1-NHCONH-A2, A1-NHCO2-A2, A1-O2CNH-A2, A1-NHSO2NH-A2, A1-NHCO-A2, A1-CONH-A2, A-NHSO2-A2, etc. (where A1, A2 = H, (un) substituted aryl, C1-6 alkyl, C2-6

Ι

alkenyl, C2-6 alkynyl, cycloalkyl, heteroaryl, or heterocyclyl); E = asingle bond, O, (un) substituted NH, CH:CH, C.tplbond.C, S, SO, SO2, (un) substituted CH2NH or CH2; B = Q-Q8 (proviso provided), etc. (where X

O, CO, S, SO, SO2, optionally substituted NH; X1, X2, X3 = optionally substituted CH, N; Y = a single bond, CO, CS, SO2); m = 0,1; n = 0-2; R2, R3 = H, (un)substituted C1-6 alkyl, C2-6 alkenyl, C3-14 carbocyclyl, heterocyclyl, C1-6 alkyl-OR5, C1-6 alkyl-SR5, C1-6 alkyl-SO2R5, heteroaryl, or aryl (where R5, R6 = H, optionally substituted C1-6 alkyl, C2-6 alkenyl, C2-6 alkynyl, aryl, cycloalkyl, heteroaryl, or heterocyclyl,

CF3); R4 = H, (un) substituted C1-6 alkyl; R7 = C1-6 alkyl, (CH2) kOR5, (CH2) kCOR5, (CH2) kCONR6R5, (CH2) kNR6COR5, (CH2) k CO2 R5, (CH2) kNR6SO2R5, (CH2) kNR6R5, F, CF3, etc.; R8 = H, cyano, C1-6 alkyl or alkoxy]. These compds. are active as potent inhibitors of the binding of very late antigen-4 (VLA-4) to proteins such as vascular cell adhesion mol.-1 (VCAM-1), the HepII/IIICS domain (CS-1 region) of fibronectin and osteopontin (no data). They are effective for preventing, inhibiting, suppressing or reducing cell adhesion and consequent or assocd. pathogenic

processes subsequently mediated by VLA-4. They are useful in treating inflammatory, autoimmune, and respiratory diseases which are selected from asthma, multiple sclerosis, rheumatoid arthritis, osteoarthritis, inflammatory bowel disease, psoriasis, host rejection following organ transplantation, atherosclerosis, and other diseases mediated by or assocd. with VLA-4. Thus,

3,5-dichlorobenzenesulfonyl chloride (86.7 mg) was added to a soln. of 2-allyloxycarbonylamino-3-(3-pyrrolidin-2-ylisoxazol-5-yl)propionic acid Et ester hydrochloride (110 mg) and sodium carbonate (93.5 mg) in water (1.5 mL) and stirred overnight to give 37%

2-Allyloxycarbonylamino-3-[3-[1-

(3,5-dichlorobenzenesulfonyl)pyrrolidin-2-y]isoxazol-5-yl]propionic acid Et ester which (59 mg) was stirred with 2 M aq. LiOH (0.5 mL) at room temp. for 40 min and acidified to pH 1 with 1 M HCl t give 91%

2-Allyloxycarbonylamino-3-[3-[1-(3,5-dichlorobenzenesulfonyl)pyrrolidin-2-y]isoxazol-5-yl]propionic acid.

IT 350673-93-7P 350673-94-8P 350673-95-9P

350673-96-0P 350674-10-1P 350674-11-2P

350674-12-3P 350674-13-4P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of amino(aryl or heteroaryl)propanoic acid derivs. and related compds. as non-peptidyl inhibitors of VLA-4 dependent cell binding for treating inflammatory, autoimmune, and respiratory diseases)

RN 350673-93-7 CAPLUS

CN 5-Oxazolepropanoic acid, 2-[1-[acetyl[3-methoxy-4-[[[(2-

methylphenyl)amino]carbonyl]amino]phenyl]amino]-3-methylbutyl]-4,5-dihydro.alpha.-methyl- (9CI) (CA INDEX NAME)

RN 350673-94-8 CAPLUS

CN 5-Oxazolepropanoic acid, .alpha.-(acetylamino)-2-[1-[acetyl[3-methoxy-4-[[[(2-methylphenyl)amino]carbonyl]amino]phenyl]amino]-3-methylbutyl]-4,5-dihydro-(9CI) (CA INDEX NAME)

RN 350673-95-9 CAPLUS

CN 5-Oxazolepropanoic acid, 2-[1-[acetyl[3-methoxy-4-[[[(2-

RN 350673-96-0 CAPLUS

CN 5-Oxazolepropanoic acid, .alpha.,.alpha.-difluoro-4,5-dihydro-2-[1-[methyl[[6-[[[(2-methylphenyl)amino]carbonyl]amino]-3pyridinyl]acetyl]amino]ethyl]- (9CI) (CA INDEX NAME)

RN 350674-10-1 CAPLUS

CN 4-Oxazolepropanoic acid, 2-[1-[acetyl[3-methoxy-4-[[[(2-

methylphenyl)amino]carbonyl]amino]phenyl]amino]-3-methylbutyl]-4,5-dihydro.alpha.-methyl- (9CI) (CA INDEX NAME)

RN 350674-11-2 CAPLUS

CN 4-Oxazolepropanoic acid, .alpha.-(acetylamino)-2-[1-[acetyl[3-methoxy-4-[[[(2-methylphenyl)amino]carbonyl]amino]phenyl]amino]-3-methylbutyl]-4,5-dihydro-(9CI) (CA INDEX NAME)

RN 350674-12-3 CAPLUS

CN 4-Oxazolepropanoic acid, 2-[1-[acetyl[3-methoxy-4-[[[(2-

methylphenyl)amino]carbonyl]amino]phenyl]amino]-3-methylbutyl]-4,5-dihydro.alpha.-[(methylsulfonyl)amino]- (9CI) (CA INDEX NAME)

350674-13-4 CAPLUS RN

4-Oxazolepropanoic acid, .alpha.,.alpha.-difluoro-4,5-dihydro-2-[1-CN [methyl[[6-[[(2-methylphenyl)amino]carbonyl]amino]-3pyridinyl]acetyl]amino]ethyl]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

REFERENCE(S): (1) Almquist, R; WO 9703094 A 1997 CAPLUS

(2) Biogen Inc; WO 9622966 A 1996 CAPLUS

(3) Du Pont Merck Pharma; WO 9637492 A 1996 CAPLUS

(4) Hagmann, W; WO 9925685 A 1999 CAPLUS (5) Lai, J; WO 9923063 A 1999 CAPLUS ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 4 OF 33 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: DOCUMENT NUMBER:

2001:500143 CAPLUS 135:236340

TITLE:

A rational approach to the design of selective

substrates and potent nontransportable inhibitors of the excitatory amino acid transporter EAAC1 (EAAT3). New glutamate and aspartate analogues as potential

neuroprotective agents

AUTHOR(S):

Campiani, Giuseppe; De Angelis, Meri; Armaroli, Silvia; Fattorusso, Caterina; Catalanotti, Bruno; Ramunno, Anna; Nacci, Vito; Novellino, Ettore;

Grewer,

Christof; Ionescu, Diana; Rauen, Thomas; Griffiths, Roger; Sinclair, Colin; Fumagalli, Elena; Mennini,

Tiziana

CORPORATE SOURCE:

Dipartimento di Scienze Farmaceutiche, Universita' degli Studi di Salerno, Fisciano, 84084, Italy

SOURCE: J. Med. Chem. (2001), 44(16), 2507-2510

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

Two three-dimensional receptor interaction models for EAAT substrates and nontransportable inhibitors have been developed, and new glutamate (Glu) and aspartate (Asp) analogs have been synthesized. The analogs 1a and 3 represent novel lead compds. for the development of EAAT substrates and nontransportable inhibitors, selective for EAATs over iGluRs, as possible neuroprotective agents useful to minimize the progression of chronic or acute neurodegenerative diseases. The role played by the protonatable amine function in the interaction with EAATs has been discussed.

## TΤ 359868-50-1P 359868-51-2P

RL: BAC (Biological activity or effector, except adverse); BPR (Biological

Absolute stereochemistry.

RN 359868-51-2 CAPLUS

CN 2-Oxazolebutanoic acid, .alpha.-amino-4-carboxy-4,5-dihydro-, (.alpha.S,4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

19

(.alpha.S, 4S) - (9CI) (CA INDEX NAME)

REFERENCE(S):

(2) Coyle, J; Science 1993, V262, P689 CAPLUS

(3) Evans, D; J Org Chem 1979, V44, P497 CAPLUS

(4) Gegelashvili, G; Mol Pharmacol 1997, V52, P6

CAPLUS

(5) Grewer, C; Proc Natl Acad Sci USA 2000, V97,

P9706

CAPLUS

(6) Koch, H; Mol Pharmacol 1999, V55, P1044 CAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 5 OF 33 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER:

2001:380569 CAPLUS

DOCUMENT NUMBER:

135:5610

TITLE:

Preparation of novel

2-(N-cyanoimino)thiazolidin-4-one

derivatives as hypolipidemics and hypocholesteremics

Yoneda, Fumio; Ohde, Hironori; Watanabe, Mayumi;

Ando,

Takashi; Yasusa, Takuya; Uegaki, Yuko

PATENT ASSIGNEE(S):

Fujimoto Brothers Co., Ltd., Japan

SOURCE:

PCT Int. Appl., 25 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

INVENTOR(S):

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT  | KIND DATE     |     |     | APPLICATION NO. DATE |     |     |     |                         |     |     |     |     |     |     |     |     |  |
|---------|---------------|-----|-----|----------------------|-----|-----|-----|-------------------------|-----|-----|-----|-----|-----|-----|-----|-----|--|
|         |               |     |     |                      |     |     |     |                         |     |     |     |     |     |     |     | .\  |  |
| WO 2001 | 70 2001036402 |     |     | A1 20010525          |     |     |     | WO 1999-JP6352 19991112 |     |     |     |     |     |     |     |     |  |
| w:      | AL,           | AM, | AT, | ΑU,                  | ΑZ, | BA, | BB, | BG,                     | BR, | BY, | CA, | CH, | CN, | CU, | CZ, | DE, |  |
|         | DK,           | EE, | ES, | FI,                  | GB, | GD, | GE, | GH,                     | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, |  |
|         | ΚE,           | KG, | ΚP, | KR,                  | ΚZ, | LC, | LK, | LR,                     | LS, | LT, | LU, | LV, | MD, | MG, | MK, | MN, |  |
|         | MW,           | MX, | NO, | ΝZ,                  | PL, | PT, | RO, | RU,                     | SD, | SE, | SG, | SI, | SK, | SL, | ТJ, | TM, |  |

TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG 2,0011010 EP 1999-974189 19991112 EP 1142885 A1 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO WO 1999-JP6352 W 19991112 PRIORITY APPLN. INFO.: MARPAT 135:5610 OTHER SOURCE(S):

$$R^3$$
 $R^4$ 
 $NH$ 
 $R^2$ 
 $N-CN$ 

GT

AB Novel 2-(N-cyanoimino)thiazolidin-4-one derivs. represented by general formula [I; ring A = benzene or its condensed ring or heterocyclic ring optionally substituted by linear or branched C1-4 alkyl, haloalkyl, OH, or

C1-4 alkoxy; R1 = single bond, O, S, methine, optionally
 phenyl-substituted C1-4 alkylene or alkenylene, R6-X, X-R6, X-R6-X,
CONR7,

Ι

NR7CO; wherein R6 = linear or branched alkylene or alkenylene; X = O, S; R7 = H, C1-4 alkyl; R2, R3 = H, C1-4 alkyl, H, C1-4 alkoxy, aralkyloxy, halo; R4 = H, C1-4 alkyl], which exhibit excellent cholesterol-lowering and triglyceride-lowering activities and are useful in the prevention or treatment of hyperlipidemia and diseases resulting therefrom, are prepd. Thus, a mixt. of 2-(N-cyanoimino)thiazolidine-4-one potassium salt 4.48, trans-4-stilbenecarboxaldehyde 5.47, ammonium acetate 2.02 g, and 100 mL ethanol was refluxed for 2 h to give 2-(N-cyanoimino)-5-[(E)-4-

styrylbenzylidene]thiazolidine-4-one (II). II at 120 mg/kg p.o once a day

for 7 days was administered to hamsters who had been fed with feed contg. 1% cholesterol and 10% coconut oil for 3 wk. It lowered a total blood cholesterol level by 41% and blood triglyceride level by 80%.

ΙT 255832-12-3P 255832-13-4P 255832-16-7P 255832-17-8P 255832-19-0P 255832-20-3P 255832-22-5P 255832-23-6P 255832-25-8P 255832-27-0P 255832-29-2P 255832-32-7P 255832-35-0P 255832-37-2P 255832-41-8P 255832-43-0P 255832-45-2P 255832-48-5P 255832-50-9P 255832-52-1P 255832-56-5P 255832-60-1P 255832-62-3P 255832-64-5P 255832-67-8P 255832-70-3P 255832-71-4P 255832-75-8P 255832-79-2P 255832-83-8P 255832-86-1P 255832-89-4P 255832-92-9P 255832-95-2P 255832-96-3P 255833-00-2P 255833-02-4P 255833-03-5P 255833-04-6P ,255833-05-7P 255833-06-8P 255833-08-0P 255833-12-6P 255833-13-7P 255833-17-1P 255833-20-6P 255833-21-7P 255833-22-8P 255833-24-0P 255833-25-1P 255833-26-2P 255833-27-3P 255833-29-5P 255833-30-8P

Double bond geometry as described by E or Z.

RN 255832-13-4 CAPLUS
CN Cyanamide, [4,5-dihydro-4-oxo-5-[[4-[(1E)-2-phenyl-1-propenyl]phenyl]methylene]-2-thiazolyl]- (9CI) (CA INDEX NAME)

Double bond geometry as described by E or Z.

RN 255832-16-7 CAPLUS
CN Cyanamide,
[4,5-dihydro-4-oxo-5-[[4-[(phenylmethoxy)methyl]phenyl]methylen
 e]-2-thiazolyl]- (9CI) (CA INDEX NAME)

RN 255832-17-8 CAPLUS
CN Cyanamide, [4,5-dihydro-5-[[4-[(1E)-1-methyl-2-phenylethenyl]phenyl]methylene]-4-oxo-2-thiazolyl]- (9CI) (CA INDEX NAME)

Double bond geometry as described by E or Z.

RN 255832-19-0 CAPLUS

CN Cyanamide, [4,5-dihydro-4-oxo-5-[[4-(3-phenylpropoxy)phenyl]methylene]-2-thiazolyl]- (9CI) (CA INDEX NAME)

RN 255832-20-3 CAPLUS

CN Cyanamide, [5-[[4-(4-chlorophenoxy)phenyl]methylene]-4,5-dihydro-4-oxo-2-thiazolyl]- (9CI) (CA INDEX NAME)

RN 255832-22-5 CAPLUS

CN Cyanamide, [4,5-dihydro-4-oxo-5-[[4-(phenylthio)phenyl]methylene]-2-thiazolyl]- (9CI) (CA INDEX NAME)

RN 255832-23-6 CAPLUS

CN Cyanamide, [5-[[4-[(1E)-2-(2-fluorophenyl)ethenyl]phenyl]methylene]-4,5-dihydro-4-oxo-2-thiazolyl]- (9CI) (CA INDEX NAME)

Double bond geometry as described by E or Z.

RN 255832-25-8 CAPLUS

CN Cyanamide,

[5-[[4-(2,5-dimethylphenoxy)phenyl]methylene]-4,5-dihydro-4-oxo-2-thiazolyl]- (9CI) (CA INDEX NAME)

RN 255832-27-0 CAPLUS

CN Cyanamide, [4,5-dihydro-4-oxo-5-[[4-(2-phenylethoxy)phenyl]methylene]-2-thiazolyl]- (9CI) (CA INDEX NAME)

RN 255832-29-2 CAPLUS

CN Cyanamide, [4,5-dihydro-4-oxo-5-[[4-(2-phenylpropoxy)phenyl]methylene]-2-thiazolyl]- (9CI) (CA INDEX NAME)

RN 255832-32-7 CAPLUS

CN Cyanamide, [4,5-dihydro-4-oxo-5-[[3-(2-phenylethoxy)phenyl]methylene]-2-thiazolyl]- (9CI) (CA INDEX NAME)

RN 255832-35-0 CAPLUS

CN Cyanamide, [4,5-dihydro-4-oxo-5-[[4-(phenylmethoxy)phenyl]methylene]-2-thiazolyl]- (9CI) (CA INDEX NAME)

RN 255832-41-8 CAPLUS
CN Cyanamide,
[4,5-dihydro-5-[[4-[(1E)-2-(4-methoxyphenyl)ethenyl]phenyl]meth
 ylene]-4-oxo-2-thiazolyl]- (9CI) (CA INDEX NAME)

Double bond geometry as described by E or Z.

RN 255832-45-2 CAPLUS CN Cyanamide, [5-[[4-(1,3-benzodioxol-5-ylmethoxy)phenyl]methylene]-4,5-

$$NC-NH$$
 $S$ 
 $CH$ 
 $O-CH_2$ 
 $O$ 

RN 255832-48-5 CAPLUS

CN Cyanamide,

[4,5-dihydro-5-[[4-[(4-methylphenyl)methoxy]phenyl]methylene]-4-oxo-2-thiazolyl]- (9CI) (CA INDEX NAME)

RN 255832-50-9 CAPLUS

CN Cyanamide,

[5-[[4-[(4-chlorophenyl)methoxy]phenyl]methylene]-4,5-dihydro-4-oxo-2-thiazolyl]- (9CI) (CA INDEX NAME)

Double bond geometry as described by  ${\tt E}$  or  ${\tt Z}$ .

RN 255832-56-5 CAPLUS
CN Cyanamide, [4,5-dihydro-4-oxo-5-[[2-(2-phenylethoxy)phenyl]methylene]-2-thiazolyl]- (9CI) (CA INDEX NAME)

RN 255832-67-8 CAPLUS
CN Cyanamide,
[4,5-dihydro-4-oxo-5-[[4-[2-(2-pyridinyl)ethenyl]phenyl]methyle
 ne]-2-thiazolyl]- (9CI) (CA INDEX NAME)

RN 255832-70-3 CAPLUS

CN Cyanamide, [5-[[3,5-dimethoxy-4-(2-phenylethoxy)phenyl]methylene]-4,5-dihydro-4-oxo-2-thiazolyl]- (9CI) (CA INDEX NAME)

$$NC-NH$$
 $N$ 
 $CH$ 
 $CH$ 
 $MeO$ 
 $OMe$ 
 $Ph-CH_2-CH_2-O$ 

RN 255832-71-4 CAPLUS

CN Benzamide,

N-[4-[[2-(cyanoamino)-4-oxo-5(4H)-thiazolylidene]methyl]phenyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 255832-75-8 CAPLUS

CN Cyanamide, [5-[[4-[(4-bromo-2-fluorophenyl)methoxy]phenyl]methylene]-4,5-dihydro-4-oxo-2-thiazolyl]- (9CI) (CA INDEX NAME)

RN 255832-79-2 CAPLUS <-----bur Break----> u => d 15 5-10 ibib abs hitstr

L5 ANSWER 5 OF 33 CAPLUS COPYRIGHT 2001 ACS ACCESSION NUMBER: 2001:380569 CAPLUS

DOCUMENT NUMBER: 135:5610

TITLE: Preparation of novel

2-(N-cyanoimino)thiazolidin-4-one

derivatives as hypolipidemics and hypocholesteremics

Yoneda, Fumio; Ohde, Hironori; Watanabe, Mayumi;

INVENTOR(S):
Ando,

Takashi; Yasusa, Takuya; Uegaki, Yuko

PATENT ASSIGNEE(S): Fujimoto Brothers Co., Ltd., Japan

SOURCE: PCT Int. Appl., 25 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PA      | PATENT NO.   |     |     |             | KIND DATE       |                |      |     |                         |                | CATI | ои ис | ο.  | DATE |          |     |     |  |  |
|---------|--------------|-----|-----|-------------|-----------------|----------------|------|-----|-------------------------|----------------|------|-------|-----|------|----------|-----|-----|--|--|
| WO      | 0 2001036402 |     |     | A1 20010525 |                 |                |      |     |                         | WO 1999-JP6352 |      |       |     |      | 19991112 |     |     |  |  |
|         | W:           | AL, | AM, | AT,         | AU,             | AZ,            | BA,  | BB, | BG,                     | BR,            | BY,  | CA,   | CH, | CN,  | CU,      | CZ, | DE, |  |  |
|         |              |     |     |             |                 |                |      |     |                         |                |      |       |     | IL,  |          |     |     |  |  |
|         |              |     |     |             |                 |                |      |     |                         |                |      |       |     | MD,  |          |     |     |  |  |
|         |              |     |     |             |                 |                |      |     |                         |                |      |       |     | SK,  |          |     |     |  |  |
|         |              | TR, | TT, | UA,         | UG,             | us,            | UZ,  | VN, | YU,                     | ZW,            | AM,  | ΑZ,   | BY, | KG,  | ΚZ,      | MD, | RU, |  |  |
|         |              | ТJ, | TM  |             |                 |                |      |     |                         |                |      |       |     |      |          |     |     |  |  |
|         | RW:          | GH, | GM, | ΚE,         | LS,             | MW,            | SD,  | SL, | SZ,                     | TZ,            | UG,  | ZW,   | ΑT, | BE,  | CH,      | CY, | DE, |  |  |
|         |              | DK, | ES, | FI,         | FR,             | GB,            | GR,  | ΙE, | IT,                     | LU,            | MC,  | NL,   | PT, | SE,  | BF,      | ВJ, | CF, |  |  |
|         |              | CG, | CI, | CM,         | GΑ,             | GN,            | GW,  | ML, | MR,                     | NE,            | SN,  | TD,   | TG  |      |          |     |     |  |  |
| EP      |              |     |     |             |                 |                | 1010 |     | EP 1999-974189 19991112 |                |      |       |     |      |          |     |     |  |  |
|         | R:           | ΑT, | BE, | CH,         | DE,             | DK,            | ES,  | FR, | GB,                     | GR,            | IT,  | LI,   | LU, | NL,  | SE,      | MC, | PT, |  |  |
|         |              | IE, | SI, | LT,         | LV,             | FI,            | RO   |     |                         |                |      |       |     |      |          |     |     |  |  |
| PRIORIT | .:           |     |     |             | Ţ               | WO 1999-JP6352 |      |     | W 19991112              |                |      |       |     |      |          |     |     |  |  |
|         |              |     |     |             | MARPAT 135:5610 |                |      |     |                         |                |      |       |     |      |          |     |     |  |  |
| GT      |              |     |     |             |                 |                |      |     |                         |                |      |       |     |      |          |     |     |  |  |

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R<sup>3</sup>
R<sup>4</sup>
O
NH
S
N-CN
```

Ι AΒ Novel 2-(N-cyanoimino)thiazolidin-4-one derivs. represented by general formula [I; ring A = benzene or its condensed ring or heterocyclic ring optionally substituted by linear or branched C1-4 alkyl, haloalkyl, OH, or C1-4 alkoxy; R1 = single bond, O, S, methine, optionally phenyl-substituted C1-4 alkylene or alkenylene, R6-X, X-R6, X-R6-X, CONR7, NR7CO; wherein R6 = linear or branched alkylene or alkenylene; X = O, S; R7 = H, C1-4 alkyl; R2, R3 = H, C1-4 alkyl, H, C1-4 alkoxy, aralkyloxy, halo; R4 = H, C1-4 alkyl], which exhibit excellent cholesterol-lowering and triglyceride-lowering activities and are useful in the prevention or treatment of hyperlipidemia and diseases resulting therefrom, are prepd. Thus, a mixt. of 2-(N-cyanoimino)thiazolidine-4-one potassium salt 4.48, trans-4-stilbenecarboxaldehyde 5.47, ammonium acetate 2.02 g, and 100 mL ethanol was refluxed for 2 h to give 2-(N-cyanoimino)-5-[(E)-4styrylbenzylidene]thiazolidine-4-one (II). II at 120 mg/kg p.o once a day for 7 days was administered to hamsters who had been fed with feed contg. 1% cholesterol and 10% coconut oil for 3 wk. It lowered a total blood cholesterol level by 41% and blood triglyceride level by 80%. IT 255832-12-3P 255832-13-4P 255832-16-7P 255832-17-8P 255832-19-0P 255832-20-3P 255832-22-5P 255832-23-6P 255832-25-8P 255832-27-0P 255832-29-2P 255832-32-7P 255832-35-0P 255832-37-2P 255832-41-8P 255832-43-0P 255832-45-2P 255832-48-5P 255832-50-9P 255832-52-1P 255832-56-5P 255832-60-1P 255832-62-3P 255832-64-5P 255832-67-8P 255832-70-3P 255832-71-4P 255832-75-8P 255832-79-2P 255832-83-8P 255832-86-1P 255832-89-4P 255832-92-9P 255832-95-2P 255832-96-3P 255833-00-2P 255833-02-4P 255833-03-5P 255833-04-6P 255833-05-7P 255833-06-8P 255833-08-0P 255833-12-6P 255833-13-7P 255833-17-1P 255833-20-6P 255833-21-7P 255833-22-8P 255833-24-0P 255833-25-1P 255833-26-2P 255833-27-3P 255833-29-5P 255833-30-8P 255833-32-0P 340810-87-9P 340810-88-0P 340810-89-1P 340810-90-4P 340810-91-5P 340810-92-6P RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of novel (N-cyanoimino) thiazolidinone derivs. as hypolipidemics and hypocholesteremics) 255832-12-3 CAPLUS RN CN Cyanamide, [4,5-dihydro-4-oxo-5-[[4-[(1E)-2-phenylethenyl]phenyl]methylene

]-2-thiazolyl]- (9CI) (CA INDEX NAME)

Double bond geometry as described by E or Z.

RN 255832-13-4 CAPLUS

CN Cyanamide, [4,5-dihydro-4-oxo-5-[[4-[(1E)-2-phenyl-1-propenyl]phenyl]methylene]-2-thiazolyl]- (9CI) (CA INDEX NAME)

Double bond geometry as described by E or Z.

RN 255832-16-7 CAPLUS

CN Cyanamide,

[4,5-dihydro-4-oxo-5-[[4-[(phenylmethoxy)methyl]phenyl]methylen e]-2-thiazolyl]- (9CI) (CA INDEX NAME)

RN 255832-17-8 CAPLUS

CN Cyanamide, [4,5-dihydro-5-[[4-[(1E)-1-methyl-2-phenylethenyl]phenyl]methylene]-4-oxo-2-thiazolyl]- (9CI) (CA INDEX NAME)

Double bond geometry as described by E or Z.

RN 255832-19-0 CAPLUS

CN Cyanamide, [4,5-dihydro-4-oxo-5-[[4-(3-phenylpropoxy)phenyl]methylene]-2-thiazolyl]- (9CI) (CA INDEX NAME)

RN 255832-20-3 CAPLUS

CN Cyanamide, [5-[[4-(4-chlorophenoxy)phenyl]methylene]-4,5-dihydro-4-oxo-2-thiazolyl]- (9CI) (CA INDEX NAME)

RN 255832-22-5 CAPLUS

CN Cyanamide, [4,5-dihydro-4-oxo-5-[[4-(phenylthio)phenyl]methylene]-2-thiazolyl]- (9CI) (CA INDEX NAME)

RN 255832-23-6 CAPLUS

CN Cyanamide, [5-[[4-[(1E)-2-(2-fluorophenyl)ethenyl]phenyl]methylene]-4,5-dihydro-4-oxo-2-thiazolyl]- (9CI) (CA INDEX NAME)

Double bond geometry as described by E or Z.

RN 255832-25-8 CAPLUS

CN Cyanamide,

[5-[[4-(2,5-dimethylphenoxy)phenyl]methylene]-4,5-dihydro-4-oxo-2-thiazolyl]- (9CI) (CA INDEX NAME)

RN 255832-27-0 CAPLUS

CN Cyanamide, [4,5-dihydro-4-oxo-5-[[4-(2-phenylethoxy)phenyl]methylene]-2-thiazolyl]- (9CI) (CA INDEX NAME)

RN 255832-29-2 CAPLUS

CN Cyanamide, [4,5-dihydro-4-oxo-5-[[4-(2-phenylpropoxy)phenyl]methylene]-2-thiazolyl]- (9CI) (CA INDEX NAME)

RN 255832-32-7 CAPLUS

CN Cyanamide, [4,5-dihydro-4-oxo-5-[[3-(2-phenylethoxy)phenyl]methylene]-2-thiazolyl]- (9CI) (CA INDEX NAME)

RN 255832-35-0 CAPLUS

CN Cyanamide, [4,5-dihydro-4-oxo-5-[[4-(phenylmethoxy)phenyl]methylene]-2-thiazolyl]- (9CI) (CA INDEX NAME)

RN 255832-37-2 CAPLUS

CN Cyanamide,

[5-[[4-(5-chloro-2-benzofuranyl)phenyl]methylene]-4,5-dihydro-4-oxo-2-thiazolyl]- (9CI) (CA INDEX NAME)

RN 255832-41-8 CAPLUS
CN Cyanamide,
[4,5-dihydro-5-[[4-[(1E)-2-(4-methoxyphenyl)ethenyl]phenyl]meth
ylene]-4-oxo-2-thiazolyl]- (9CI) (CA INDEX NAME)

Double bond geometry as described by E or Z.

RN 255832-43-0 CAPLUS

CN Cyanamide,

[4,5-dihydro-4-oxo-5-[(3-phenoxyphenyl)methylene]-2-thiazolyl]-(9CI) (CA INDEX NAME)

RN 255832-45-2 CAPLUS

CN Cyanamide, [5-[[4-(1,3-benzodioxol-5-ylmethoxy)phenyl]methylene]-4,5-dihydro-4-oxo-2-thiazolyl]- (9CI) (CA INDEX NAME)

RN 255832-48-5 CAPLUS

CN Cyanamide,

[4,5-dihydro-5-[[4-[(4-methylphenyl)methoxy]phenyl]methylene]-4-oxo-2-thiazolyl]- (9CI) (CA INDEX NAME)

RN 255832-52-1 CAPLUS
CN Cyanamide, [4,5-dihydro-5-[[3-methoxy-4-[(1E)-2-phenylethenyl]phenyl]methylene]-4-oxo-2-thiazolyl]- (9CI) (CA INDEX NAME)

Double bond geometry as described by E or Z.

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OMe
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RN 255832-56-5 CAPLUS

Cyanamide, [4,5-dihydro-4-oxo-5-[[2-(2-phenylethoxy)phenyl]methylene]-2-CN thiazolyl]- (9CI) (CA INDEX NAME)

$$NC-NH$$
 $N$ 
 $O$ 
 $CH$ 
 $Ph-CH_2-CH_2-O$ 

RN 255832-60-1 CAPLUS

CN Cyanamide,

[4,5-dihydro-4-oxo-5-[(4-phenoxyphenyl)methylene]-2-thiazolyl]-(9CI) (CA INDEX NAME)

<---->User Break---->

=> d 15 6-10 ibib abs hitstr

ANSWER 6 OF 33 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER:

2001:300677 CAPLUS

DOCUMENT NUMBER:

134:326397

TITLE: INVENTOR(S):

Preparation of pyrrolidine neuraminidase inhibitors Maring, Clarence J.; Giranda, Vincent L.; Kempf, Dale J.; Stoll, Vincent S.; Sun, Minghua; Zhao, Chen; Gu, Yu Gui; Hanessian, Stephen; Wang, Gary T.; Krueger, Allan C.; Chen, Hui-ju; Chen, Yuanwei; Degoey, David A.; Flosi, William J.; Grampovnik, David J.; Kati, Warren M.; Kennedy, April L.; Klein, Larry L.; Lin,

Zhen; Madigan, Darold L.; Mcdaniel, Keith F.;

Muchmore, Steven W.; Sham, Hing L.; Stewart, Kent D.; Tu, Noah P.; Wagenaar, Frank L.; Wang, Sheldon;

Wiedeman, Paul E.; Xu, Yibo; Yeung, Ming C.;

Bayrakdarian, Malken; Luo, Xuehong

PATENT ASSIGNEE(S):

Abbott Laboratories, USA PCT Int. Appl., 714 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

FAMILY ACC. NUM. COUNT:

English

PATENT INFORMATION:

APPLICATION NO. DATE PATENT NO. KIND DATE \_\_\_\_\_ 20010426 WO 2000-US27910 20001010 WO 2001028996 A2 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO:

US 1999-421787 A 19991019

OTHER SOURCE(S):

MARPAT 134:326397

GΙ

or

the

AB Title compds. (I) [wherein X = (un)substituted CONH, NH, CSNH, NHCS, NHSO2, SO2NH; Y = H, (halo)alkyl, (halo)alkenyl, alkynyl, cycloalkyl(alkyl), cycloalkenyl(alkyl), cycloalkenylalkenyl, (halo)phenyl,

N(O): CHCH3, halo, heterocyclyl, or (un)substituted (CH2)nOH, CH(OH)CH2(OH), (CH2)nSH, (CH2)nCN, (CH2)nN3, (CH2)nNH2, etc.; n = 0-2; R1 = (CH2)CO2H, (CH2)SO3H, (CH2)SO2H, (CH2)PO3H2, (CH2)PO2H, tetrazolyl(methyl), (CH2)CONHSO2R11, or (un)substituted (CH2)SO2NH2; R11

alkyl, alkenyl, cycloalkyl(alkyl), cycloalkenyl(alkyl), cycloalkenylalkenyl, aryl(alkyl), arylalkenyl, heterocyclyl(alkyl), or heterocyclylalkenyl; R2 = H, (cyclo)alkyl, (cyclo)alkenyl, haloalkyl, or haloalkenyl; or R2X = (un)substituted heterocyclyl; R3 and R4 = independently H, cycloalkyl, cycloalkenyl, heterocyclyl, aryl, or (un)substituted ketones, acids, amides, alc., thiols, etc.; or R3 and R4 taken together with the C to which they are attached form a carbocyclic

heterocyclic ring; R5 = H, alkynyl, cyclopropyl cyclobutyl, or (un)substituted Me, OH, acyl, imino, NH2, etc.; R6 and R7 = independently H, alkyl, alkenyl cycloalkyl(alkyl), cycloalkylalkenyl, cycloalkenyl(alkyl), cycloalkenylalkenyl, aryl(alkyl)arylalkenyl, heterocyclyl(alkyl), or heterocyclylalkenyl; R10 = H, (cyclo)alkyl, (cyclo)alkenyl, or fluoro] were prepd. as neuraminidase inhibitors for

treatment of diseases caused by microorganisms having a neuraminidase, esp. influenza neuraminidase. For example, (.+-.)-II.bul.HCl was synthesized in an 11-step sequence involving (1) cycloaddn. of acrolein and t-Bu N-benzylglycinate to give (.+-.)-(2S,3RS,5R)-1-benzyl-2-vinyl-3-formylpyrrolidine-5-carboxylic acid t-Bu ester (45%), (2) redn. of the aldehyde to the alc. (66%), (3) O-protection using t-butyldimethylsilyl chloride (71%), (4) oxidn. of the vinyl group to an aldehyde (46%), (5) addn. of 1-bromo-2-ethylbutane to the aldehyde (66%), (6) reductive amination of the ketone (64%), (7) amidation with AcOAc (72%), (8) deprotection of the alc. (61%), (9) etherification of the alc. with iodomethane, (10) N-deprotection (47%), and (11) deesterification and salt formation using 6N HCl. I inhibit influenza A and influenza B neuraminidase with Ki values between 0.1 nM and 700 .mu.M; Ki values for preferred compds. ranged from 0.1 nM to 3.5 .mu.M. In a cell culture plaque formation inhibition assay, I inhibited influenza virus A/N2/Tokyo in MDCK cells with EC50 values between 100 .mu.M and 1 nM; preferred compds. gave EC50 values between 1 .mu.M and 1

```
nM.
IT
     247926-92-7P
     RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic
     preparation); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (prepn. of pyrrolidine neuraminidase inhibitors)
     247926-92-7 CAPLUS
RN
CN
     D-Proline, 5-[(1R)-1-(acetylamino)-3-(4,5-dihydro-2-thiazolyl)-2-
     hydroxypropyl]-4-(1Z)-1-propenyl-, (4S,5R)-rel-, mono(trifluoroacetate)
     (salt) (9CI) (CA INDEX NAME)
     CM
          1
     CRN 247926-91-6
     CMF C16 H25 N3 O4 S
```

Relative stereochemistry.
Double bond geometry as shown.

CM 2

CRN 76-05-1

CMF C2 H F3 O2

Relative stereochemistry. Double bond geometry as shown.

L5 ANSWER 7 OF 33 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER:

2001:185718 CAPLUS

DOCUMENT NUMBER:

134:237481

TITLE:

Preparation of 4-[4-[2-(2-pyridyl- or 5,6,7,8-tetrahydro-1,8-naphthyridin-2-

yl)ethoxy]phenyl]butanoic acid derivatives as

vitronectin receptor antagonists

INVENTOR(S):

Manley, Peter J.; Miller, William H.; Uzinskas, Irene

N.

PATENT ASSIGNEE(S):

Smithkline Beecham Corporation, USA

SOURCE:

PCT Int. Appl., 68 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PA                                  | PATENT NO. |      |     |     |       | KIND DATE |      |                        | A    | PPLI | CATI | ο.   | DATE |      |      |     |     |  |
|-------------------------------------|------------|------|-----|-----|-------|-----------|------|------------------------|------|------|------|------|------|------|------|-----|-----|--|
|                                     | 2001       |      |     |     |       | W         | 0 20 | 00-U                   | s245 | 14   | 2000 | 0907 |      |      |      |     |     |  |
| ***                                 |            |      |     |     |       |           |      | BR.                    | CA,  | CN,  | CZ,  | DZ,  | EE,  | GE,  | GH,  | GM, | HR, |  |
|                                     |            |      |     |     |       |           |      |                        |      |      |      |      |      | LV,  |      |     |     |  |
|                                     |            |      |     |     |       |           |      |                        |      |      |      |      |      | TZ,  |      |     |     |  |
|                                     |            |      |     |     |       | AZ,       |      |                        |      |      |      |      |      |      |      |     |     |  |
|                                     | RW:        |      |     |     |       |           |      |                        |      |      |      |      |      | AT,  | BE,  | CH, | CY, |  |
|                                     |            | DE,  | DK, | ES, | FI,   | FR,       | GB,  | GR,                    | ΙE,  | IT,  | LU,  | MC,  | NL,  | PT,  | SE,  | BF, | ВJ, |  |
|                                     |            |      |     |     |       | GΑ,       |      |                        |      |      |      |      |      |      |      |     |     |  |
| ΙA                                  | J 2000     | 0735 | 43  | Α   | 5     | 2001      | 0410 | AU 2000-73543 20000907 |      |      |      |      |      |      |      |     |     |  |
| PRIORITY APPLN. INFO.: US 1999-1527 |            |      |     |     |       |           |      |                        |      |      |      |      |      |      |      |     |     |  |
|                                     |            |      |     |     |       |           |      | 1                      | wo 2 | 000- | US24 | 514  | W    | 2000 | 0907 |     |     |  |
| 001100                              |            | 101. |     |     | N/D D | חתכם      | 121. | 227/                   | 01   |      |      |      |      |      |      |     |     |  |

OTHER SOURCE(S):

MARPAT 134:237481

GI

MeNH N (CH<sub>2</sub>)<sub>2</sub>- = Q 
$$\stackrel{H}{N}$$
 N (CH<sub>2</sub>)<sub>2</sub>- = Q<sup>1</sup>

The title compds. (I; R1 = heterocyclyl, aryl; R2 = Q, Q1) or pharmaceutically acceptable salts thereof, which are vitronectin (.alpha.V.beta.3) receptor antagonists, are prepd. These compds. are useful in the treatment of a disease state in which antagonism of the .alpha.V.beta.3 receptor is indicated, in particular osteoporosis (no data). They also inhibit angiogenesis, tumor growth, or tumor metastasis and are useful for the treatment of atherosclerosis, restenosis, or rheumatoid arthritis or as antineoplastic agents (no data). Thus, Me

3-(4-carboxy-1,3-oxazol-2-yl)-4-[4-[(tert-butyloxycarbonyl)oxy]phenyl]buta noate was condensed with morpholine in the presence of (i-Pr)2NEt, pyridine, and BPFFH at room temp. for 18 h, followed by treatment with 4

Ν

HCl in dioxane at room temp. for 18 h to give, after silica gel chromatog., 88% Me  $\,$ 

(.+-.)-3-[4-[(morpholin-4-yl)carbonyl]-1,3-oxazol-2-yl] 4-(4-hydroxyphenyl)butanoate as a clear oil. The latter compd. was
 condensed with 6-(methylamino)-2-pyridylethanol using diisopropyl
 azodicarboxylate and triphenylphosphine in CH2Cl2 at, room temp. for 18 h
 to give, after silica gel chromatog., Me (.+-.)-4-[4-[2-(6-

methylaminopyridin-2-yl)-1-ethoxy]phenyl]-3-[4-[(morpholin-4-yl)carbonyl]- 1,3-oxazol-2-yl]butanoate which was sapond. with a mixt. of 1.0 N LiOH and

THF/H2O (1:1) and acidified to pH 6 using 10% HCl to give, after purifn. using reverse HPLC, (.+-.)-4-[4-[2-[6-(methylamino)pyridin-2-yl]-1-ethoxyphenyl]-3-[4-(morpholin-4-yl)carbonyl]-1,3-oxazol-2-yl]butanoic

acid (26% over 2 steps).

IT 243641-55-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (intermediate; prepn. of [[(pyridyl- or

tetrahydronaphthyridinyl)ethoxy

]phenyl]butanoic acid derivs. as vitronectin receptor antagonists and remedies for treating .alpha.V.beta.3 receptor-related diseases

RN 243641-55-6 CAPLUS

CN 2-Oxazolepropanoic acid, 4,5-dihydro-4-[(phenylmethoxy)carbonyl]-.beta.[[4-[[tris(1-methylethyl)silyl]oxy]phenyl]methyl]-, methyl ester (9CI)
(CA INDEX NAME)

L5 ANSWER 8 OF 33 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2001:137056 CAPLUS

DOCUMENT NUMBER: 134:198080

TITLE: Angiogenesis inhibitors comprising as the active

ingredient compound having chymase inhibitory effect

INVENTOR(S): Ishihara, Takafumi; Ohashi, Yoshiki
PATENT ASSIGNEE(S): Santen Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 37 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

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KIND DATE
                                         APPLICATION NO. DATE
    PATENT NO.
     _____
                                         _____
                     A1
                                        WO 2000-JP5389 20000811
                           20010222
    WO 2001012226
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
            HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,
            LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD,
            SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU,
           ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
            CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                         JP 2000-243554 20000811
    JP 2001114699
                     A2 20010424
                                                     A 19990812
PRIORITY APPLN. INFO.:
                                       JP 1999-228120
    The invention relates to remedies [capsules, eye drops, injections] for
    diseases in which angiogenesis participates having been developed
    by studying the effect of a compd. having a chymase inhibitory effect on
    angiogenesis. Because of showing an effect of inhibiting angiogenesis,
    the compd. having a chymase inhibitory effect is expected as a preventive
    or a remedy for diseases in which angiogenesis participates, in
    particular, diseases assocd. with intraocular angiogenesis such
    as diabetic retinopathy, macular degeneration, retinal phlebemphraxis,
    premature infant retinopathy and angiogenic glaucoma.
    322397-31-9P 327024-92-0P
ΙT
    RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
        (angiogenesis inhibitors comprising as the active ingredient compd.
       having chymase inhibitory effect)
RN
    322397-31-9 CAPLUS
    1(2H)-Pyrazineacetamide,
N-[(1S)-2-(4,5-dihydro-4,4-dimethyl-2-oxazolyl)-2-
    hydroxy-1-(phenylmethyl)ethyl]-3,4-dihydro-3-(1-methylethyl)-2-oxo-6-
```

phenyl-4-(3-pyridinylcarbonyl)-, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 327024-92-0 CAPLUS

CN 1(2H)-Pyrazineacetamide, N-[(1S)-1-[(4,5-dihydro-4,4-dimethyl-2-oxazolyl)methyl]-2-phenylethyl]-3,4-dihydro-3-(1-methylethyl)-2-oxo-6-phenyl-4-(3-pyridinylcarbonyl)-, (3R)- (9CI) (CA INDEX NAME)

## IT 322397-56-8P 322397-57-9P 327024-89-5P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(angiogenesis inhibitors comprising as the active ingredient compd. having chymase inhibitory effect)

RN 322397-56-8 CAPLUS

CN Pyridinium,

3-[[(2R)-4-[2-[[(1S)-2-(4,5-dihydro-4,4-dimethyl-2-oxazolyl)-2-

oxo-1-(phenylmethyl)ethyl]amino]-2-oxoethyl]-3,4-dihydro-2-(1-methylethyl)3-oxo-5-phenyl-1(2H)-pyrazinyl]carbonyl]-1-(phenylmethyl)-, bromide (9CI)
(CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

## • Br-

RN 322397-57-9 CAPLUS

CN Pyridinium,

1-(2-amino-2-oxoethyl)-3-[[(2R)-4-[2-[[(1S)-2-(4,5-dihydro-4,4-dimethyl-2-oxazolyl)-2-oxo-1-(phenylmethyl)ethyl]amino]-2-oxoethyl]-3,4-dihydro-2-(1-methylethyl)-3-oxo-5-phenyl-1(2H)-pyrazinyl]carbonyl]-, bromide (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Br-

327024-89-5 CAPLUS RN

CNPyridinium,

4-[[(2R)-4-[2-[[(1S)-2-(4,5-dihydro-4,4-dimethyl-2-oxazolyl)-2-(4,5-dihydro-4,4-dimethyl-2-oxazolyl)]

oxo-1-(phenylmethyl)ethyl]amino]-2-oxoethyl]-3,4-dihydro-2-(1-methylethyl)-3-oxo-5-phenyl-1(2H)-pyrazinyl]carbonyl]-1-methyl-, iodide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

REFERENCE(S):

(1) Muramastu, M; Eur J Pharmacol, CAPLUS 2000:554395 2000, V402(1/2), P181

(2) Wakamoto Pharmaceutical Co Ltd; JP 08-208654 A CAPLUS

(3) Wakamoto Pharmaceutical Co Ltd; EP 713876 Al 1996 CAPLUS

CAPLUS COPYRIGHT 2001 ACS ANSWER 9 OF 33 L5

ACCESSION NUMBER: DOCUMENT NUMBER:

2001:78369 CAPLUS

134:131554

TITLE:

Preparation of novel thiazine or pyrazine derivatives

as chymase inhibitors

INVENTOR(S): Matsumoto, Junzo; Nishimura, Kazuo; Ban, Masakazu;

Fujimura, Ken-ichi; Kobayashi, Naoyuki; Hori,

Masanori; Honda, Takahiro

PATENT ASSIGNEE(S): Santen Pharmaceutical Co., Ltd., Japan; Matsumoto,

Eiko

SOURCE: PCT Int. Appl., 278 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

APPLICATION NO. DATE PATENT NO. KIND DATE \_\_\_\_\_ -----WO 2000-JP4964 20000726 20010201 WO 2001007419 A1 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG JP 2001097957 A2 20010410 JP 2000-224667 20000726 JP 1999-210907 A 19990726 PRIORITY APPLN. INFO.: MARPAT 134:131554 OTHER SOURCE(S):

GΙ

Novel compds. having as the main skeleton 3-oxo-3,4-dihydro-2H-1,4-thiazine or 2-oxo-1,2,3,4-tetrahydropyrazine, which are represented by general formula [I; wherein X = S, R6-(A2)n-N; R1, R2 = H, lower alkyl, cycloalkyl, cycloalkyl, aryl; R3, R4 = H, lower alkyl, cycloalkyl, aryl, heteroaryl; R5 = H, lower alkyl, cycloalkyl, aryl, A3-A4-R7; wherein R6 = H, lower alkyl, cycloalkyl, HO, lower alkoxy, aryl, aryloxy, heteroaryl; R7 = H, lower alkyl, HO, lower alkoxy, aryl, aryloxy, NH2, lower alkylamino, arylamino, arom. or nonarom. heterocyclyl; n = 0,1; A1 = lower

alkylene; A2 = CO, SO2; A3 = lower alkylene; A4 = CO, oxalyl; the above lower alkyl is optionally substituted by halo, HO, lower alkoxy, aryl, or aryloxy; the above lower alkoxy or lower alkylene is optionally substituted by aryl], are prepd. These compds. are useful for the treatment of chymase-related **diseases** such as myocardial infarction, heart failure, vascular restenosis after PTCA, hypertension, diabetes complications, allergies, and asthma.

(3S)-3-[[[[(3R)-4-benzoyl-3-isopropyl-2-oxo-6-phenyl-1,2,3,4-tetrahydropyrazin-1-yl]methyl]carbonyl]amino]-2-oxo-4-phenylbutanoic acid iso-Pr ester which showed IC50 of 0.20 .times. 10-6 M against chymase.

IT 322397-22-8P 322397-23-9P 322397-24-0P 322397-25-1P 322397-26-2P 322397-28-4P 322397-29-5P 322397-30-8P 322397-31-9P

I

## 322397-32-0P 322397-33-1P

RL: BAC (Biological activity or effector, except adverse); RCT (Reactant);

SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of novel thiazine or pyrazine derivs. as chymase inhibitors for

treatment of chymase-related diseases)

RN 322397-22-8 CAPLUS

CN 1(2H)-Pyrazineacetamide, 4-acetyl-N-[(1S)-2-(4,5-dihydro-4,4-dimethyl-2-

oxazolyl) -2-hydroxy-1-(phenylmethyl) ethyl] -3, 4-dihydro-3-(1-methylethyl) -2oxo-6-phenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 322397-23-9 CAPLUS

CN 1(2H)-Pyrazineacetamide,

N-[(1S)-2-(4,5-dihydro-4,4-dimethyl-2-oxazolyl)-2-

hydroxy-1-(phenylmethyl)ethyl]-3,4-dihydro-3-(1-methylethyl)-4-(2-methyl-1-oxopropyl)-2-oxo-6-phenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 322397-24-0 CAPLUS

CN 1(2H)-Pyrazineacetamide,

N-[(1S)-2-(4,5-dihydro-4,4-dimethyl-2-oxazolyl)-2-

hydroxy-1-(phenylmethyl)ethyl]-3,4-dihydro-3-(1-methylethyl)-4-(2-methyl-1-oxopropyl)-2-oxo-6-phenyl-, (3R)- (9CI) (CA INDEX NAME)

RN 322397-25-1 CAPLUS CN 1(2H)-Pyrazineacetamide, N-[(1S)-2-(4,5-dihydro-5,5-dimethyl-2-thiazolyl)-

2-hydroxy-1-(phenylmethyl)ethyl]-3,4-dihydro-3-(1-methylethyl)-4-(2-methyl-1-oxopropyl)-2-oxo-6-phenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 322397-26-2 CAPLUS

CN 1(2H)-Pyrazineacetamide,

N-[(1S)-2-(4,5-dihydro-5,5-dimethyl-2-thiazolyl)-

2-hydroxy-1-(phenylmethyl)ethyl]-3,4-dihydro-3-(1-methylethyl)-4-(2-methyl-1-oxopropyl)-2-oxo-6-phenyl-, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 322397-28-4 CAPLUS

CN 1(2H)-Pyrazineacetamide, 4-benzoyl-N-[(1S)-2-(4,5-dihydro-4,4-dimethyl-2-

oxazolyl)-2-hydroxy-1-(phenylmethyl)ethyl]-3,4-dihydro-3-(1-methylethyl)-2-oxo-6-phenyl- (9CI) (CA INDEX NAME)

RN 322397-29-5 CAPLUS
CN 1(2H)-Pyrazineacetamide,
N-[(1S)-2-(4,5-dihydro-4,4-dimethyl-2-oxazolyl)-2hydroxy-1-(phenylmethyl)ethyl]-3,4-dihydro-3-(1-methylethyl)-2-oxo-6phenyl-4-(4-pyridinylcarbonyl)-, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 322397-30-8 CAPLUS
CN 1(2H)-Pyrazineacetamide,
N-[(1S)-2-(4,5-dihydro-5,5-dimethyl-2-thiazolyl)2-hydroxy-1-(phenylmethyl)ethyl]-3,4-dihydro-3-(1-methylethyl)-2-oxo-6phenyl-4-(4-pyridinylcarbonyl)-, (3R)- (9CI) (CA INDEX NAME)

RN 322397-31-9 CAPLUS
CN 1(2H)-Pyrazineacetamide,
N-[(1S)-2-(4,5-dihydro-4,4-dimethyl-2-oxazolyl)-2hydroxy-1-(phenylmethyl)ethyl]-3,4-dihydro-3-(1-methylethyl)-2-oxo-6phenyl-4-(3-pyridinylcarbonyl)-, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 322397-32-0 CAPLUS

CN 1(2H)-Pyrazineacetamide, N-[(1S,2R)-2-(4,5-dihydro-4,4-dimethyl-2-

oxazolyl)-2-hydroxy-1-(phenylmethyl)ethyl]-3,4-dihydro-3-(1-methylethyl)-2oxo-6-phenyl-4-(2-pyridinylcarbonyl)-, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 322397-33-1 CAPLUS

CN 1(2H)-Pyrazineacetamide, N-[(1S,2S)-2-(4,5-dihydro-4,4-dimethyl-2-

oxazolyl)-2-hydroxy-1-(phenylmethyl)ethyl]-3,4-dihydro-3-(1-methylethyl)-2oxo-6-phenyl-4-(2-pyridinylcarbonyl)-, (3R)- (9CI) (CA INDEX NAME)

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IT
     322395-87-9P 322395-88-0P 322395-89-1P
     322395-92-6P 322395-93-7P 322395-94-8P
     322395-95-9P 322395-96-0P 322395-97-1P
     322396-82-7P 322396-83-8P 322396-84-9P
     322396-87-2P 322396-88-3P 322396-89-4P
     322397-34-2P 322397-35-3P 322397-36-4P
     322397-37-5P 322397-38-6P 322397-40-0P
     322397-41-1P 322397-42-2P 322397-43-3P
     322397-44-4P 322397-54-6P 322397-55-7P
     322397-56-8P 322397-57-9P 322397-58-0P
    322397-61-5P 322397-62-6P 322397-63-7P
    322397-64-8P 322397-65-9P
    RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic
    preparation); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (prepn. of novel thiazine or pyrazine derivs. as chymase inhibitors
for
        treatment of chymase-related diseases)
     322395-87-9 CAPLUS
RN
     1(2H)-Pyrazineacetamide,
CN
4-acetyl-N-[(1S)-2-(4,5-dihydro-2-oxazolyl)-2-oxo-
     1-(phenylmethyl)ethyl]-3,4-dihydro-3-(1-methylethyl)-2-oxo-6-phenyl-
(9CI)
       (CA INDEX NAME)
```

Absolute stereochemistry.

```
RN 322395-88-0 CAPLUS
CN 1(2H)-Pyrazineacetamide, 4-acetyl-N-[(1S)-2-(4,5-dihydro-2-thiazolyl)-2-oxo-1-(phenylmethyl)ethyl]-3,4-dihydro-3-(1-methylethyl)-2-oxo-6-phenyl-(9CI) (CA INDEX NAME)
```

RN 322395-89-1 CAPLUS

CN 1(2H)-Pyrazineacetamide, N-[(1S)-2-(4,5-dihydro-2-oxazolyl)-2-oxo-1-

(phenylmethyl)ethyl]-3,4-dihydro-4-(methoxyacetyl)-3-(1-methylethyl)-2-oxo-6-phenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 322395-92-6 CAPLUS

CN 1(2H)-Pyrazineacetamide,

N-[(1S)-2-(4,5-dihydro-4,4-dimethyl-2-oxazolyl)-2-

oxo-1-(phenylmethyl)ethyl]-3,4-dihydro-4-(methoxyacetyl)-3-(1-methylethyl)-2-oxo-6-phenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 322395-93-7 CAPLUS

CN 1(2H)-Pyrazineacetamide,

N-[(1S)-2-(4,5-dihydro-4,4-dimethyl-2-oxazolyl)-2-

oxo-1-(phenylmethyl)ethyl]-3,4-dihydro-3-(1-methylethyl)-2-oxo-6-phenyl-4-(phenylsulfonyl)- (9CI) (CA INDEX NAME)

RN 322395-94-8 CAPLUS
CN 1(2H)-Pyrazineacetamide,
N-[(1S)-2-(4,5-dihydro-4,4-dimethyl-2-oxazolyl)-2oxo-1-(phenylmethyl)ethyl]-4-(2,2-dimethyl-1-oxopropyl)-3,4-dihydro-3-(1-methylethyl)-2-oxo-6-phenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 322395-95-9 CAPLUS
CN 1(2H)-Pyrazineacetamide, 4-acetyl-N-[(1S)-2-(4,5-dihydro-5,5-dimethyl-2-thiazolyl)-2-oxo-1-(phenylmethyl)ethyl]-3,4-dihydro-3-(1-methylethyl)-2-oxo-6-phenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 322395-96-0 CAPLUS CN 1(2H)-Pyrazineacetamide, N-[(1S)-2-(4,5-dihydro-5,5-dimethyl-2-thiazolyl)-

2-oxo-1-(phenylmethyl)ethyl]-3,4-dihydro-3-(1-methylethyl)-2-oxo-6-phenyl-4-(2-pyridinylcarbonyl)- (9CI) (CA INDEX NAME)

RN 322395-97-1 CAPLUS

CN 1(2H)-Pyrazineacetamide,

N-((1S)-2-(4,5-dihydro-5,5-dimethyl-2-thiazolyl)-

2-oxo-1-(phenylmethyl) = thyl]-3, 4-dihydro-3-(1-methylethyl)-2-oxo-6-phenyl-4-(3-pyridinylcarbonyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 322396-82-7 CAPLUS

CN 1(2H)-Pyrazineacetamide, 4-acetyl-N-[(1S)-2-(4,5-dihydro-2-oxazolyl)-2-hydroxy-1-(phenylmethyl)ethyl]-3,4-dihydro-3-(1-methylethyl)-2-oxo-6-phenyl- (9CI) (CA INDEX NAME)

RN 322396-83-8 CAPLUS

CN 1(2H)-Pyrazineacetamide, 4-acetyl-N-[(1S)-2-(4,5-dihydro-2-thiazolyl)-2-hydroxy-1-(phenylmethyl)ethyl]-3,4-dihydro-3-(1-methylethyl)-2-oxo-6-phenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

u => d 15 11-20 ibib abs hitstr

L5 ANSWER 11 OF 33 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER:

2000:356169 CAPLUS

DOCUMENT NUMBER:

133:4651

TITLE:

Preparation of thiazolidine derivatives, matrix

metalloprotease inhibitors containing them, and their

therapeutic uses

CODEN: JKXXAF

INVENTOR(S):

Kawamura, Noriaki; Yamashita, Toshio; Takizawa,

Masayuki; Yoshimura, Koji

PATENT ASSIGNEE(S):

Takeda Chemical Industries, Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 42 pp.

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

GI

AB The derivs. I [rings A and B = (un)substituted homocyclic or heterocyclic group, wherein the substituents are bonded together with Y to form a condensed ring; R1 = H, (un)substituted hydrocarbyl; X = O, S; Y = linking group, divalent (un)substituted C1-3 aliph. hydrocarbylene; O(CH2)p (p =

0-3), S(0)r (r = 0-2), CONH, NHCO, NHCONH, NHSO2; m = 1, 2; n = 0, 1] or their salts are prepd. by treatment of R1NHC(S)CH (R1 = same as above) or their salts with maleimide derivs. II (A, B, Y, and n = same as above) or maleamic acid derivs. III (A, B, Y, and n = same as above) or their

salts.

Also claimed are matrix metalloproteinase inhibitors contg. I or their salts and prophylactic and therapeutic agents contg. I or their salts for osteoarthritis, rheumatoid arthritis, osteoporosis, cancer, periodontal diseases, or corneal ulcer. N-[4-(4-methylphenoxy)benzyl]maleimid e, prepd. from 4-bromobenzonitrile, 4-methylphenol, and maleic anhydride, was treated with isobutylamine, Et3N, and CS2 to give 3-isobutyl-N-[4-(4methylphenoxy)benzyl]-4-oxo-2-thioxo-5-thiazolidineacetamide. This inhibited human recombinant MMP-13 at IC50 2 nM.

270260-87-2P, Ethyl 3-[2-isobutylimino-4-oxothiazolidin-5-TT

yl]propionate

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. of thiazolidine derivs. as matrix metalloprotease inhibitors and drugs contq. them)

270260-87-2 CAPLUS RN

5-Thiazolepropanoic acid, 4,5-dihydro-2-[(2-methylpropyl)amino]-4-oxo-, CN ethyl ester (9CI) (CA INDEX NAME)

ANSWER 12 OF 33 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER:

2000:314533 CAPLUS

DOCUMENT NUMBER: TITLE:

Preparation of phenyloxoazapropylcycloalkane derivatives and analogs as potassium channel

inhibitors

132:334285

INVENTOR(S):

Baker, Robert K.; Chee, Jennifer; Bao, Jianming; Garcia, Maria L.; Kaczorowski, Gregory J.; Kotliar, Andrew; Kayser, Frank; Liu, Chou Juitsai; Miao, Shouwu; Rupprecht, Kathleen M.; Parsons, William H.; Schmalhofer, William A.; Claiborne, Christopher F.; Liverton, Nigel; Claremon, David A.; Thompson, Wayne

PATENT ASSIGNEE(S):

Merck & Co., Inc., USA PCT Int. Appl., 243 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

SOURCE:

Patent English

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO. KIND |     |     |     |     | ND       | DATE |      |     | A    | PPLI | CATI | и ис | ο.   | DATE |     |     |     |  |
|-----------------|-----|-----|-----|-----|----------|------|------|-----|------|------|------|------|------|------|-----|-----|-----|--|
|                 |     |     |     |     |          |      |      |     |      |      |      |      |      |      |     |     |     |  |
| WO 2000025770   |     |     | A.  | 1   | 20000511 |      |      | W   | 0 19 | 99-U | S249 | 49   | 1999 | 1026 |     |     |     |  |
|                 | w:  | AE, | AL, | AM, | ΑT,      | ΑU,  | ΑZ,  | BA, | BB,  | BG,  | BR,  | BY,  | CA,  | CH,  | CN, | CR, | CU, |  |
|                 |     | CZ, | DE, | DK, | DM,      | EE,  | ES,  | FI, | GB,  | GD,  | GE,  | GH,  | GM,  | HR,  | ΗU, | ID, | ΙL, |  |
|                 |     |     |     |     |          |      |      |     |      |      |      |      |      | LU,  |     |     |     |  |
|                 |     | MG, | MK, | MN, | MW,      | MX,  | NO,  | NZ, | PL,  | PT,  | RO,  | RU,  | SD,  | SE,  | SG, | SI, | SK, |  |
|                 |     | SL, | ТJ, | TM, | TR,      | TT,  | ΤZ,  | UA, | UG,  | US,  | UZ,  | VN,  | YU,  | ZA,  | ZW, | AM, | ΑZ, |  |
|                 |     | BY, | KG, | ΚZ, | MD,      | RU,  | ТJ,  | TM  |      |      |      |      |      |      |     |     |     |  |
|                 | RW: | GH, | GM, | ΚE, | LS,      | MW,  | SD,  | SL, | SZ,  | ΤZ,  | UG,  | ZW,  | ΑT,  | BE,  | CH, | CY, | DE, |  |
|                 |     | DK, | ES, | FI, | FR,      | GB,  | GR,  | ΙE, | IT,  | LU,  | MC,  | NL,  | PΤ,  | SE,  | BF, | ВJ, | CF, |  |
|                 |     | CG, | CI, | CM, | GΑ,      | GN,  | GW,  | ML, | MR,  | ΝĒ,  | SN,  | TD,  | ΤG   |      |     |     |     |  |
| EP 1143965      |     |     |     | A   | 1        | 2001 | 1017 |     | E    | P 19 | 99-9 | 1999 | 1026 |      |     |     |     |  |

AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

IE, SI, LT, LV, FI, RO

US 1998-106416 19981030

PRIORITY APPLN. INFO.: WO 1999-US24949 W 19991026

OTHER SOURCE(S):

MARPAT 132:334285

GΙ

AΒ The title compds. I [T1 = (CH2)x; T2 = (CH2)y; dotted line indicates asingle bond or double bond; x, y = 0 - 2; R1, R2, R6, R7 = halo, hydroxy, alkyl, etc.; R3, R4 = H, cyano, nitro, etc.; further details on R3 and R4 are given; R5 = H, halo, hydoxy, etc.; further details on R3 and R5 are given; R10 = H, etc.], useful as potassium channel inhibitors (no data), are prepd. I are useful in the treatment of autoimmune disorders, cardiac

arrhythmias (no data), etc. Formulations are given.

Ι

· IT 267403-12-3P

> RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. and effect of phenyloxoazapropylcycloalkane derivs. and analogs

with potassium channel inhibiting activity)

RN 267403-12-3 CAPLUS

Carbamic acid, (4,5-dihydro-2-oxazolyl)-, trans-4-[[(2-CN methoxybenzoyl)amino]methyl]-4-phenylcyclohexyl ester (9CI) (CA INDEX NAME)

Relative stereochemistry.

REFERENCE COUNT:

REFERENCE(S):

(1) Markaryan; Arm Khim Zh 1974, V27(9), P779 CAPLUS

(2) Purchase; Bioorg & Med Chem 1997, V5(4), P739

CAPLUS

ANSWER 13 OF 33 CAPLUS COPYRIGHT 2001 ACS  $L_5$ ACCESSION NUMBER: 2000:116861 CAPLUS

DOCUMENT NUMBER: 132:166232

```
vitronectin receptor antagonists
                        Manley, Peter J.; Miller, William H.
INVENTOR(S):
                        Smithkline Beecham Corp., USA
PATENT ASSIGNEE(S):
                        PCT Int. Appl., 50 pp.
SOURCE:
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
                        English
LANGUAGE:
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
    PATENT NO. KIND DATE
                                         APPLICATION NO. DATE
     _____
                                          ______
    WO 2000007544 A2 20000217
WO 2000007544 A3 20000518
                                         WO 1999-US17665 19990803
                           20000217
        W: AE, AL, AU, BA, BB, BG, BR, CA, CN, CR, CZ, EE, GE, GH, GM, HR,
            HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN,
            MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU,
             ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
             ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
             CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                    A1 20000228 AU 1999-53362
                                                           19990803
    AU 9953362
                                     BR 1999-12638 19990803
EP 1999-938993 19990803
                           20010502
     BR 9912638
                      Α
                          20010530
                     A2
     EP 1102587
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO
                                          NO 2001-620 20010201
70 95703 P 19980807
     NO 2001000620
                   A 20010206
PRIORITY APPLN. INFO.:
                                       US 1998-95703
                                       WO 1999-US17665 W 19990803
OTHER SOURCE(S):
                       MARPAT 132:166232
GΙ
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *
     The title compds. [I; Y = CR11R11, NR11CO; R1 = alkylheteroaryl,
AΒ
     alkylaryl, H, etc.; R2 = II-IV, etc.; W = (CHRq)aU(CHRq)b; U = absent,
CO,
     O, etc.; G = NRe, S, O; Rg = H, alkyl, heteroarylalkyl, etc.; Re = H,
     alkyl, arylalkyl, etc.; Rb, Rc = H, alkyl, arylalkyl, etc.; Rb and Rc are
     joined together to form a (un) substituted 5-6 membered arom. or non-arom.
     carbocyclic or heterocyclic ring; Q1-Q4 = N, CRy, provided that no more
     than one of Q1-Q4 = N; R11 = H, alkyl, arylalkyl, etc.; R12 = R11, COR11,
     CO2R11; Ry = H, halo, CN, etc.; a = 0-2; b = 0-2; u = 0-1; v = 0-1],
which
     are vitronectin receptor antagonists and are useful in the treatment of
     inflammation, cancer and cardiovascular disorders, such as
atherosclerosis
     and restenosis, and diseases wherein bone resorption is a
     factor, such as osteoporosis, were prepd. and formulated. E.g., a
    multi-step synthesis of V was given. Compds. I inhibit vitronectin
    binding to SK&F 107260 at 2.0-0.2 .mu.M.
     258881-24-2P
ТТ
    RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
        (prepn. of 4-(1,3-oxazol-2-yl)butanoic acids as vitronectin receptor
        antagonists)
    258881-24-2 CAPLUS
RN
     2-Oxazolebutanoic acid, 4,5-dihydro-4-(methoxycarbonyl)-.beta.-phenyl-,
CN
     ethyl ester, (4S) - (9CI) (CA INDEX NAME)
```

Preparation of 4-(1,3-oxazol-2-yl)butanoic acids as

Absolute stereochemistry.

TITLE:

L5 ANSWER 14 OF 33 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2000:15184 CAPLUS

DOCUMENT NUMBER: 132:64256

TITLE: Preparation of non-peptidyl inhibitors of VLA-4

dependent cell binding useful in treating inflammatory, autoimmune and respiratory

diseases

INVENTOR(S):

Duplantier, Allen Jacob; Milici, Anthony John;

Chupak,

Louis Stanley

PATENT ASSIGNEE(S):

Pfizer Products Inc., USA

SOURCE:

PCT Int. Appl., 120 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

GΙ

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

|                                   | PATENT NO. |      |      |        |             | ND  | DATE |      |     | APPLICATION NO. DAT |      |       |      |    |     |      |      |     |     |
|-----------------------------------|------------|------|------|--------|-------------|-----|------|------|-----|---------------------|------|-------|------|----|-----|------|------|-----|-----|
|                                   | WO         | 2000 | 0004 | <br>77 | A1 20000106 |     |      |      |     | 7                   | vo 1 | 999-  | -IB9 | 73 |     | 1999 |      |     |     |
|                                   |            | w:   | AL,  | AM,    | AT,         | AU, | ΑZ,  | ВA,  | BB, | BG,                 | , BR | , BY  | , c  | Α, | CH, | CN,  | CU,  | CZ, | DE, |
|                                   |            |      | DK,  | EE,    | ES,         | FI, | GB,  | GD,  | GΕ, | GH,                 | , GM | I, HF | ₹, н | U, | ID, | IL,  | IS,  | JP, | ΚE, |
|                                   |            |      | KG,  | KP,    | KR,         | KZ, | LC,  | LK,  | LR, | LS                  | , LT | , LU  | J, L | v, | MD, | MG,  | MK,  | MN, | MW, |
|                                   |            |      |      |        |             |     |      |      |     |                     |      |       |      |    |     | SL,  |      |     |     |
|                                   |            |      | TT,  | UA,    | UG,         | US, | UZ,  | VN,  | YU, | zw                  | , AM | i, A2 | Z, B | Υ, | KG, | ΚZ,  | MD,  | RU, | ТJ, |
| TM                                |            |      |      |        |             |     |      |      |     |                     |      |       |      |    |     |      |      |     |     |
|                                   |            | RW:  | GH,  | GM,    | ΚE,         | LS, | MW,  | SD,  | SL, | SZ                  | , UG | , ZV  | V, A | Τ, | BE, | CH,  | CY,  | DE, | DK, |
|                                   |            |      | ES,  | FΙ,    | FR,         | GB, | GR,  | ΙE,  | IT, | LU                  | , MC | , NI  | , P  | Т, | SE, | BF,  | ВJ,  | CF, | CG, |
|                                   |            |      | CI,  | CM,    | GΑ,         | GN, | GW,  | ML,  | MR, | NE                  | , sn | I, TI | ), Т | G  |     |      |      |     |     |
|                                   | ΑU         | 9938 | 416  |        | A           | 1   | 2000 | 0117 |     | 7                   | AU 1 | .999- | -384 | 16 |     | 1999 | 0531 |     |     |
|                                   | BR         | 9911 | 701  |        | A           |     | 2001 | 0320 |     | ]                   | BR 1 | .999- | -117 | 01 |     | 1999 | 0531 |     |     |
|                                   | ΕP         | 1091 | 943  |        | A           | 1   | 2001 | 0418 |     | 1                   | EP 1 | .999- | -921 | 04 | 6   | 1999 | 0531 |     |     |
|                                   |            | R:   | ΑT,  | BE,    | CH,         | DE, | DK,  | ES,  | FR, | GB                  | , GR | R, II | r, L | I, | LU, | NL,  | SE,  | PT, | ΙE, |
|                                   |            |      |      |        | LV,         |     |      |      |     |                     |      |       |      |    |     |      |      |     |     |
|                                   |            | 6306 |      |        |             |     |      |      |     |                     |      |       |      |    |     |      |      |     |     |
|                                   |            | 2000 |      |        |             |     |      |      |     |                     |      |       |      |    |     |      |      |     |     |
| PRIO                              | RIT        | APP  | LN.  | INFO   | . :         |     |      |      |     | US :                | 1998 | -911  | L80  |    | Ρ   | 1998 | 0630 |     |     |
|                                   |            |      |      |        |             |     |      |      |     | WO :                | 1999 | -IBS  | 973  |    | W   | 1999 | 0531 |     |     |
| OTHER SOURCE(S): MARPAT 132:64256 |            |      |      |        |             |     |      |      |     |                     |      |       |      |    |     |      |      |     |     |

## \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The title compds. [I; A = (un)substituted aryl, heteroaryl, heterocyclyl, etc.; B = II-IV, etc.; E = a single bond, O, CH:CH, etc.; X = O, S, SO, SO2, etc.; Y = CO, CS, SO2, etc.; m = 0-2; n = 1-2; p = 1-2; R = CO2R5; CONO, etc.; R2, R3 = H, alkyl, alkenyl, etc.; R2R3 = (un)substituted spiro(C3-14)carbocyclic ring; R2-R4 together with the C and N atoms to which they are attached = (un)substituted heteroaryl, heterocyclyl; R5 = H, alkyl, cycloalkyl, aryl; R6 = H, alkyl, (CH2)r-cycloalkyl, etc.; r = 0-2], useful in treating or preventing an inflammatory, autoimmune or respiratory disease such as asthma, multiple sclerosis, rheumatoid

arthritis, osteoarthritis, inflammatory bowel disease, psoriasis, transplant rejection, and atherosclerosis, by inhibiting cell adhesion

and

consequent or assocd. pathogenic processes subsequently mediated by VLA-4 (no data), were prepd. E.g., a multi-step synthesis of the title compd. V, was given. Compds. I are effective at 20 .mu.g - 0.5 mg/kg/day.

IT 253346-20-2P 253346-50-8P 253346-51-9P 253346-52-0P 253346-53-1P 253346-54-2P 253346-55-3P 253346-56-4P 253346-67-5P 253346-65-5P 253346-66-6P 253346-67-7P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of non-peptidyl inhibitors of VLA-4 dependent cell binding useful in treating inflammatory, autoimmune and respiratory

diseases)

RN 253346-20-2 CAPLUS

CN 5-Oxazoleacetic acid, 4,5-dihydro-2-[3-methyl-1-[[[4-[[[(2-methylphenyl)amino]carbonyl]amino]phenyl]acetyl]amino]butyl]- (9CI) (CFINDEX NAME)

RN 253346-50-8 CAPLUS

CN 5-Oxazolepropanoic acid, 4,5-dihydro-2-[3-methyl-1-[[[4-[[[(2-methylphenyl)amino]carbonyl]amino]phenyl]acetyl]amino]butyl]- (9CI) (CA INDEX NAME)

RN 253346-51-9 CAPLUS

CN 5-Oxazolepropanoic acid,

2-[1-[[[4-[[[(2-fluorophenyl)amino]carbonyl]amino]phenyl]acetyl]amino]-3-methylbutyl]-4,5-dihydro- (9CI) (CA INDEX NAME)

RN 253346-53-1 CAPLUS

CN 5-Oxazolebutanoic acid, 4,5-dihydro-2-[3-methyl-1-[[[4-[[[(3-methyl-2-pyridinyl)amino]carbonyl]amino]phenyl]acetyl]amino]butyl]- (9CI) (CA INDEX NAME)

RN 253346-54-2 CAPLUS

CN 5-Oxazolepropanoic acid, 2-[1-[[[4-[[[(3-cyclopentyl-2-pyridinyl)amino]carbonyl]amino]phenyl]acetyl]amino]-3-methylbutyl]-4,5-dihydro-(9CI) (CA INDEX NAME)

RN 253346-55-3 CAPLUS

RN 253346-56-4 CAPLUS

CN 5-Thiazolepropanoic acid, 4,5-dihydro-2-[3-methyl-1-[[[3-methyl-4-[[(2-pyridinylamino)carbonyl]amino]phenyl]acetyl]amino]butyl]- (9CI) (CA INDEX

NAME)

RN 253346-57-5 CAPLUS

CN 5-Thiazoleacetic acid, 2-[1-[[[3-fluoro-4-[[(2-pyridinylamino)carbonyl]amino]phenyl]acetyl]amino]-3-methylbutyl]-4,5-dihydro-(9CI) (CA INDEX NAME)

RN 253346-58-6 CAPLUS

CN 5-Thiazolepropanoic acid,

4,5-dihydro-2-[1-[[[3-methoxy-4-[[[(3-methoxy-2-pyridinyl)amino]carbonyl]amino]phenyl]acetyl]amino]-3-methylbutyl]-,
1,1-dioxide (9CI) (CA INDEX NAME)

RN 253346-63-3 CAPLUS

CN 4-Oxazolepropanoic acid, 4,5-dihydro-2-[3-methyl-1-[[[4-[[[(2-methylphenyl)amino]carbonyl]amino]phenyl]acetyl]amino]butyl]- (9CI) (CA INDEX NAME)

RN 253346-64-4 CAPLUS
CN 4-Oxazolebutanoic acid, 4,5-dihydro-2-[3-methyl-1-[[[4-[[[(3-1)]

4-Oxazolebutanoic acid, 4,5-dihydro-2-[3-methyl-1-[[[4-[[[(3-methyl-2-pyridinyl)amino]carbonyl]amino]phenyl]acetyl]amino]butyl]- (9CI) (CA INDEX NAME)

RN 253346-65-5 CAPLUS

CN 4-Oxazolepropanoic acid, 4,5-dihydro-2-[1-[[[3-methoxy-4-[[[(2-methylphenyl)amino]carbonyl]amino]phenyl]acetyl]amino]-3-methylbutyl]-(9CI) (CA INDEX NAME)

RN 253346-66-6 CAPLUS

CN 4-Thiazolepropanoic acid, 4,5-dihydro-2-[3-methyl-1-[[[3-methyl-4-[[(2-pyridinylamino)carbonyl]amino]phenyl]acetyl]amino]butyl]- (9CI) (CA INDEX

NAME)

RN 253346-67-7 CAPLUS

CN 4-Thiazolepropanoic acid,

4,5-dihydro-2-[1-[[[3-methoxy-4-[[[(3-methoxy-2-

pyridinyl)amino]carbonyl]amino]phenyl]acetyl]amino]-3-methylbutyl]-,
1,1-dioxide (9CI) (CA INDEX NAME)

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. of non-peptidyl inhibitors of VLA-4 dependent cell binding useful in treating inflammatory, autoimmune and respiratory

diseases)

RN 253348-70-8 CAPLUS

CN 5-Oxazoleacetic acid, 4,5-dihydro-2-[3-methyl-1-[[[4-[[[(2-methylphenyl)amino]carbonyl]amino]phenyl]acetyl]amino]butyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT:

2

REFERENCE(S):

(1) Biogen Inc; WO 9622966 A 1996 CAPLUS

(2) Takeda Chemical Industries Ltd; EP 0529858 A 1993 CAPLUS

L5 ANSWER 15 OF 33 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER:

1999:460418 CAPLUS

DOCUMENT NUMBER:

131:87915

TITLE:

Preparation of imidazole derivatives as therapeutic

agents

INVENTOR(S):

Sueoka, Hiroyuki; Yasuoka, Jouji; Nishiyama, Akira; Kiuchi, Masatoshi; Yamamoto, Katsuya; Sugahara, Kunio

PATENT ASSIGNEE(S):

Yoshitomi Pharmaceutical Industries, Ltd., Japan

SOURCE:

PCT Int. Appl., 183 pp.

\_ \_ \_ .

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

Patent Japanese

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| F                      | PATENT NO.             |         |     |     | KIND DATE |     |      |     | I      | APPLI | CATI     | и ис | ο.       | DATE     |      |     |     |  |
|------------------------|------------------------|---------|-----|-----|-----------|-----|------|-----|--------|-------|----------|------|----------|----------|------|-----|-----|--|
| -<br>W                 | 70 9933                | 9933827 |     |     | A1 1999   |     |      |     | -<br>V | 70 19 | <br>98-J | P593 | 19981224 |          |      |     |     |  |
|                        | W:                     | AL,     | AM, | AT, | ΑU,       | ΑZ, | BA,  | BB, | BG,    | BR,   | BY,      | CA,  | CH,      | CN,      | CU,  | CZ, | DE, |  |
|                        |                        | DK,     | EE, | ES, | FI,       | GB, | GD,  | GE, | GH,    | GM,   | HR,      | ΗU,  | ID,      | IL,      | IN,  | IS, | JP, |  |
|                        |                        | ΚE,     | KG, | KR, | KZ,       | LC, | LK,  | LR, | LS,    | LT,   | LU,      | LV,  | MD,      | MG,      | MK,  | MN, | MW, |  |
|                        |                        | MX,     | NO, | NZ, | PL,       | PT, | RO,  | RU, | SD,    | SE,   | SG,      | SI,  | SK,      | SL,      | ТJ,  | TM, | TR, |  |
|                        |                        | TT,     | UA, | UG, | US,       | UZ, | VN,  | YU, | ZW,    | AM,   | ΑZ,      | BY,  | KG,      | ΚZ,      | MD,  | RU, | ТJ, |  |
| TM                     |                        |         |     |     |           |     |      |     |        |       |          |      |          |          |      |     |     |  |
|                        | RW:                    | GH,     | GM, | ΚE, | LS,       | MW, | SD,  | SZ, | UG,    | ZW,   | ΑT,      | BE,  | CH,      | CY,      | DE,  | DK, | ES, |  |
|                        |                        | FI,     | FR, | GB, | GR,       | ΙE, | ΙT,  | LU, | MC,    | NL,   | PT,      | SE,  | BF,      | ВJ,      | CF,  | CG, | CI, |  |
|                        |                        | CM,     | GΑ, | GN, |           |     |      |     |        | TD,   |          |      |          |          |      |     |     |  |
| P                      | AU 9916901 A           |         |     |     |           |     | 0719 |     | I      | \U 19 | 99-1     | 6901 |          | 19981224 |      |     |     |  |
| Ţ                      | US 6288061 B1 20010911 |         |     |     |           |     |      |     |        | JS 20 | 00-5     | 9821 | 6        | 20000621 |      |     |     |  |
| PRIORITY APPLN. INFO.: |                        |         |     |     |           |     |      |     | JP 1   | L997- | 3596     | 71   | Α        | 19971226 |      |     |     |  |
|                        |                        |         |     |     |           |     |      | ,   | WO 1   | L998- | JP59     | 30   | W        | 1998     | 1224 |     |     |  |
|                        |                        |         |     |     |           |     |      |     | JP 1   | L999- | 1740     | 74   | Α        | 1999     | 0621 |     |     |  |
|                        |                        |         |     |     |           |     |      |     | JP 2   | 2000- | 4516     | 5    | А        | 2000     | 0217 |     |     |  |

AB Title compds. [I; or pharmaceutically acceptable salts thereof: wherein R1

is hydrogen, optically substituted alkyl or the like; R2 is hydrogen, optically substituted alkyl or the like; R3 is optically substituted heteroaryl; and R4 is optically substituted cycloalkyl, optically substituted Ph or the like, provided that when R1 is hydrogen and R2 is

Ph or Ph substituted with halogeno, lower alkyl or lower alkoxy, R3 is benzothiazolyl or phenyl-substituted benzothiazolyl; dotted bonds are singe or double] are prepd. and exhibit an inhibitory activity against the

prodn. of IL-4 and IL-5 form Th2 cells, and are therefore useful as preventive and therapeutic agents for allergic **diseases** such as atopic dermatitis, bronchial asthma and allergic rhinitis. Title compd. II was prepd.

IT 229632-08-0P 229632-09-1P 229632-10-4P 229632-11-5P 229632-12-6P 229632-18-2P 229632-19-3P 229632-20-6P 229632-21-7P 229632-22-8P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of imidazole derivs. as inhibitors)

RN 229632-08-0 CAPLUS

CN 1H-Imidazole-4-carboxamide, N-(4,5-dihydro-2-thiazolyl)-5-(4-methoxyphenyl)-2-(4-nitrophenyl)- (9CI) (CA INDEX NAME)

RN 229632-09-1 CAPLUS
CN 1H-Imidazole-4-carboxamide,
2-(4-aminophenyl)-N-(4,5-dihydro-2-thiazolyl)5-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

RN 229632-10-4 CAPLUS

CN 1H-Imidazole-4-carboxamide, N-(4,5-dihydro-2-thiazolyl)-2-[4-(dimethylamino)phenyl]-5-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

RN 229632-11-5 CAPLUS

CN 1H-Imidazole-4-carboxamide, N-(4,5-dihydro-2-thiazolyl)-5-(4-methoxyphenyl)-2-[4-(methylamino)phenyl]- (9CI) (CA INDEX NAME)

RN 229632-12-6 CAPLUS

CN 1H-Imidazole-4-carboxamide, 2-[4-(butylamino)phenyl]-N-(4,5-dihydro-2-thiazolyl)-5-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

RN 229632-18-2 CAPLUS

CN 1H-Imidazole-4-carboxamide, N-(4,5-dihydro-2-thiazoly1)-5-(4-methoxypheny1)-2-(3-nitropheny1)- (9CI) (CA INDEX NAME)

RN 229632-19-3 CAPLUS

CN 1H-Imidazole-4-carboxamide,

2-(3-aminophenyl)-N-(4,5-dihydro-2-thiazolyl)-5-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

RN 229632-20-6 CAPLUS

CN 1H-Imidazole-4-carboxamide, N-(4,5-dihydro-2-thiazolyl)-2-[3-(dimethylamino)phenyl]-5-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

229632-21-7 CAPLUS RN

1H-Imidazole-4-carboxamide, N-(4,5-dihydro-2-thiazolyl)-5-(4-CN methoxyphenyl)-2-[3-(methylamino)phenyl]- (9CI) (CA INDEX NAME)

229632-22-8 CAPLUS RN

1H-Imidazole-4-carboxamide, 2-[3-(butylamino)phenyl]-N-(4,5-dihydro-2-CN thiazolyl)-5-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

(1) Yoshitomi Pharmaceutical Industries Ltd; JP REFERENCE(S):

6310767 A 1988

ANSWER 16 OF 33 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER:

1999:325915 CAPLUS

DOCUMENT NUMBER:

130:347432

TITLE:

Receptor with an affinity for compounds of the

oxazoline class, and therapeutic use of the compounds

INVENTOR(S): Louis, William J.; Jackman, Graham P.; Conway,

Elizabeth L.; Gundlach, Andrew L.; Iakovidis,

Dimitri;

King, Paul R.; Louis, Simon N. S.; Nero, Tracy

PATENT ASSIGNEE(S): The University of Melbourne, Australia

SOURCE: PCT Int. Appl., 65 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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APPLICATION NO. DATE
    PATENT NO.
                   KIND DATE
    -----
                                        _____
                    A1
    WO 9924411
                          19990520
                                       WO 1998-AU919 19981105
        W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
            DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE,
            KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW,
            MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR,
            TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ,
ΤM
        RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
            FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
            CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                    A1 20001018 EP 1998-952426
                                                        19981105
    EP 1044194
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, FI
                                         JP 2000-520425
                                                       19981105
    JP 2001522839
                     т2
                          20011120
                                      AU 1997-202 A 19971105
PRIORITY APPLN. INFO.:
                                                      W 19981105
                                      WO 1998-AU919
                       MARPAT 130:347432
OTHER SOURCE(S):
    The invention relates to a novel receptor, in particular to a new type of
     receptor with an affinity for compds. of the oxazoline class, compds.
    which bind to this receptor, and the use of these compds. in the
treatment
    of diseases, esp. diseases of the central nervous
    system, the cardiovascular system and the kidney.
    224790-35-6P 224790-37-8P 224790-39-0P
    224790-40-3P 224790-41-4P 224790-42-5P
    224790-43-6P 224790-44-7P 224790-46-9P
    RL: BAC (Biological activity or effector, except adverse); BPR
(Biological
    process); SPN (Synthetic preparation); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
       (receptor with affinity for oxazoline class compds., compd. prepn.,
and
       therapeutic use)
RN
    224790-35-6 CAPLUS
```

CN

RN 224790-37-8 CAPLUS

CN 2-Oxazolamine, N-[(1R)-1-cyclohexylethyl]-4,5-dihydro- (9CI) (CA INDEX NAME)

2-Oxazolamine, N-(dicyclohexylmethyl)-4,5-dihydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 224790-39-0 CAPLUS

CN 2-Oxazolamine, N-[(1S)-1-cyclohexylethyl]-4,5-dihydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 224790-40-3 CAPLUS

CN 2-Oxazolamine, 4,5-dihydro-N-[(1R)-1-(4-nitrophenyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 224790-41-4 CAPLUS

CN 2-Oxazolamine, N-[(1R)-1-(4-aminophenyl)ethyl]-4,5-dihydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 224790-42-5 CAPLUS

CN Phenol, 4-[2-[(4,5-dihydro-2-oxazolyl)amino]ethyl]- (9CI) (CA INDEX NAME)

$$N$$
 $NH-CH_2-CH_2$ 
 $OH$ 

RN 224790-43-6 CAPLUS
CN 2-Oxazolamine, 4,5-dihydro-N-[3-[4-(phenylmethoxy)phenyl]propyl]- (9CI)
(CA INDEX NAME)

$$NH-(CH2)3$$
 $O-CH2-Ph$ 

RN 224790-44-7 CAPLUS

CN 2-Oxazolamine, 4,5-dihydro-N-(2-phenoxyethyl)- (9CI) (CA INDEX NAME)

NH-
$$CH_2$$
- $CH_2$ - $OPh$ 

RN 224790-46-9 CAPLUS

CN 2-Oxazolamine, 4,5-dihydro-N-[2-(4-methoxyphenoxy)ethyl]- (9CI) (CA INDEX

NAME)

$$\begin{array}{c}
N \\
NH-CH_2-CH_2-O
\end{array}$$
OMe

IT **224952-13-0**, (+)-S 8349

RL: BAC (Biological activity or effector, except adverse); BPR (Biological

process); THU (Therapeutic use); BIOL (Biological study); PROC (Process);
USES (Uses)

(receptor with affinity for oxazoline class compds., compd. prepn.,

and

therapeutic use)

RN 224952-13-0 CAPLUS

CN 2-Oxazolamine, N-(1-cyclopropyl-2,2,2-trifluoroethyl)-4,5-dihydro-, (+)-(9CI) (CA INDEX NAME)

Rotation (+).

Currently available stereo shown.

REFERENCE COUNT:

REFERENCE(S):

18

- (2) Deckert, V; Clin Exp Pharmacol Physiol 1991, V18(6), P401 CAPLUS
- (5) Hirashima; Nippon Noyaku Gakkaishi 1996, V21(4), P419 CAPLUS
- (6) Jennings, K; Pestic Biochem Physiol 1988, V30(2), P190 CAPLUS
- (8) King, P; Annals of the New York Academy of

Sciences 1995, V763, P194 CAPLUS

(9) King, P; European Journal of Pharmacology 1995,

V281(3), P341 CAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 17 OF 33 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1999:134371 CAPLUS

DOCUMENT NUMBER: 130:232495

TITLE: Thiazoles and pharmaceutical compositions and

formation inhibitors of TNF-.alpha. or IFN-.gamma.

containing the thiazoles

INVENTOR(S): Hashimoto, Hiromasa; Imamura, Katsuaki; Takagi, Hideo

PATENT ASSIGNEE(S): Japan Tobacco, Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 112 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

OTHER SOURCE(S): MARPAT 130:232495 GI For diagram(s), see printed CA Issue.

AB Thiazoles I [R = (substituted) lower alkyl, carboxy, lower

alkoxycarbonyl,

carbamoyl, (lower alkyl-substituted) carbamoyl; R1 = (substituted) C3-7 cycloalkyl; R2 = (substituted) aryl, (substituted) arom. heterocyclyl contg. 1-3 of N, O, and/or S atoms, Z, CONH(CH2)nQ1; Q indicates (substituted) heterocyclic residue; Q1 = (substituted) aryl,

(substituted)

arom. heterocyclyl contg. 1-3 of N, O, and/or S atoms, (substituted) C3-7 cycloalkyl, Z (Q = same as above); n = 0-4] or their pharmaceutically acceptable salts are useful for pharmaceutical compns. and formation inhibitors of TNF-.alpha. or IFN-.gamma.. The thiazoles are useful for treatment or prevention of inflammatory, allergic, and autoimmune diseases. 4-Cyclopentyl-2-ethyl-5-[4-(N-

hydroxyamidino)phenyl]thiazole (prepn. given) inhibited the formation of TNF-.alpha. in peripheral blood mononuclear cells with IC50 of 0.02 .mu.M.

## IT 221214-05-7P 221214-06-8P

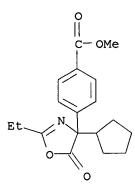
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (Thiazoles and pharmaceutical compns. and formation inhibitors of TNF-.alpha. or IFN-.gamma. contg. the thiazoles)

RN 221214-05-7 CAPLUS

CN 5(4H)-Oxazolone, 4-cyclopentyl-2-ethyl- (9CI) (CA INDEX NAME)

RN 221214-06-8 CAPLUS

CN Benzoic acid, 4-(4-cyclopentyl-2-ethyl-4,5-dihydro-5-oxo-4-oxazolyl)-, methyl ester (9CI) (CA INDEX NAME)



L5 ANSWER 18 OF 33 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1999:113706 CAPLUS

DOCUMENT NUMBER: 130:168661

TITLE: Preparation of N-sulfonyl phenylalanine dipeptide

derivatives and analogs as inhibitors of leukocyte

adhesion mediated by VLA-4

INVENTOR(S): Thorsett, Eugene D.; Semko, Christopher M.;

Sarantakis, Dimitrios; Pleiss, Michael A.; Lombardo,

Louis John; Kreft, Anthony; Konradi, Andrei W.;

Grant,

Francine S.; Dressen, Darren B.; Dappen, Michael S.;

Baudy, Reinhardt Bernhard; Ashwell, Susan

PATENT ASSIGNEE(S): Athena Neurosciences, Inc., USA; American Home

Products Corporation

SOURCE: PCT Int. Appl., 254 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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APPLICATION NO. DATE
                    KIND DATE
    PATENT NO.
                                         _____
     _____
                    A1 19990211 WO 1998-US15313 19980730
    WO 9906431
        W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
            DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG,
            KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
            NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
            FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
            CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                     A1 19990222 AU 1998-86611
                                                           19980730
    AU 9886611
                     A1 20000524
                                         EP 1998-937990
                                                           19980730
    EP 1001972
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO
                                          BR 1998-12114
                                                           19980730
                           20000718
    BR 9812114
                     A
     JP 2001512134
                      Т2
                                          JP 2000-505186
                                                           19980730
                           20010821
    NO 2000000450
                           20000328
                                         NO 2000-450
                                                           20000128
                      Α
                                       US 1997-920394
                                                        A1 19970731
PRIORITY APPLN. INFO.:
                                       WO 1998-US15313 W 19980730
```

OTHER SOURCE(S): MARPAT 130:168661

Disclosed are title compds. R1SO2NR2CHR3QCHR5COR6 [R1 = (un)substituted alkyl, (un)substituted aryl, (un)substituted cycloalkyl, (un)substituted heterocyclyl; R2 = H, any group R1; R1R2 may form (un)substituted heterocyclic ring; R3 = H, any group R1; R2R3 may form (un)substituted heterocyclic ring; R5 = (CH2)x-Ar-R5'; R5' = substituted alkylcarbonylamino, alkoxyaryl, aryl, heteroaryl, NR2, alkoxy-NR2, alkenyl, alkynyl, aryloxy, heteroaryloxy, tetrazolyl, etc.; each R = H, any group R1; Ar = (un)substituted aryl or heteroaryl; x = 1-4; Q =

C(X)NR7; R7 = H, alkyl; X = O, S; R6 = NH2, (un)substituted alkoxy, (un)substituted cycloalkoxy, succinimidyloxy, adamantylamino, .beta.-cholest-5-en-3-yloxy, NHOY, NH(CH2)pCO2Y, OCH2NR9R10; Y = H, (un)substituted alkyl, (un)substituted aryl; p = 1-8; R9 = 1-8

(un) substituted

CO-aryl; R10 = H, CH2CO2R11, NHSO2Z; R11 = alkyl; Z = (un)substituted alkyl, (un)substituted cycloalkyl, (un)substituted aryl, (un)substituted heteroaryl, (un)substituted heterocyclyl; and pharmaceutically acceptable salts thereof, with provisos] which bind VLA-4 (also referred to as integrin .alpha.4.beta.1 and CD49d/CD29). Certain of these compds. also inhibit leukocyte adhesion and, in particular, leukocyte adhesion

mediated

ΙT

by VLA-4. Such compds. are useful in the treatment of inflammatory diseases in a mammalian patient, e.g., human, wherein the disease may be, for example, asthma, Alzheimer's disease, atherosclerosis, AIDS dementia, diabetes, inflammatory bowel disease, rheumatoid arthritis, tissue transplantation, tumor metastasis and myocardial ischemia. The compds. can also be administered for the treatment of inflammatory brain diseases such as multiple sclerosis. Thus, BOP-mediated peptide coupling of Ts-Pro-Phe(4-NH2)-OMe (Ts = tosyl) with Boc-Gly-OH, followed by sapon., gave desired title compd. Ts-Pro-Phe(4-Boc-Gly-NH)-OH. All prepd. compds. have IC50 .ltoreq. 15 .mu.M in a VLA-4 binding assay.

220397-96-6P 220397-97-7P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of N-sulfonyl phenylalanine dipeptide derivs. and analogs as inhibitors of leukocyte adhesion mediated by VLA-4)

RN 220397-96-6 CAPLUS

CN Phenylalanine,

1-[(4-methylphenyl)sulfonyl]-L-prolyl-4-[3-[(4,5-dihydro-4-oxo-5-phenyl-2-oxazolyl)amino]-1-propynyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 220397-97-7 CAPLUS

CN Phenylalanine, N-methyl-N-[(4-methylphenyl)sulfonyl]glycyl-4-[3-[(4,5-dihydro-4-oxo-5-phenyl-2-oxazolyl)amino]-1-propynyl]- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 5

REFERENCE(S): (1) Adams, S; WO 9622966 A 1996 CAPLUS

(2) Cytel Corp; WO 9515973 A 1995 CAPLUS

(3) Hoffmann La Roche; DE 2357334 A 1974 CAPLUS

(4) Okamoto, S; DE 2655636 A 1977 CAPLUS(5) Pentapharm AG; WO 9216549 A 1992 CAPLUS

L5 ANSWER 19 OF 33 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER:

1998:786189 CAPLUS

DOCUMENT NUMBER:

130:90520

TITLE:

Amino alcohol esters as ceramide analogs and pharmaceuticals containing them for treatment of

nerve

diseases

INVENTOR(S):

Inokuchi, Kimikazu; Jinbo, Masayuki; Fujiwara,

Michihiro

PATENT ASSIGNEE(S):

Seikagaku Kogyo Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 19 pp.

CODEN: JKXXAF

DOCUMENT TYPE: LANGUAGE:

SOURCE:

Patent Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 10324671 A2 19981208 JP 1997-133548 19970523

OTHER SOURCE(S): MARPAT 130:90520

Title pharmaceuticals, e.g. brain protecting agents, contain
R3CH2CH(NHCOR2)CHR1O2C(CH2)nR4 [I; R1 = alkyl, alkenyl, (substituted)
cycloalkyl, (substituted) aryl; R2 = (hydroxy)alkyl, (hydroxy)alkenyl,
alkoxy, aralkyloxy; R3 = (substituted) amino group; R4 = H, lower alkyl,
NH2, mono- or dialkylamino, lower alkoxy, CO2H; n = 1-4] or their salts.
(1S,2S)-2-decanoylamino-3-morpholino-1-phenyl-1-propanol.HCl [prepd. from
(1S,2S)-2-benzyloxycarbonylamino-1-phenyl-1,3-propanediol in 5 steps] was
acetylated by Ac2O and pyridine in CH2Cl2 at room temp. overnight to give
55.2% (1S,2S)-I (R1 = Ph, COR2 = decanoyl, R3 = morpholino, R4 = H, n =
1). L-Threo-I (R1 = Ph, COR2 = decanoyl, R3 = morpholino, R4 = H, n = 1)
was i.v. administered to rats after repeated cerebral ischemia to show
good recovery of spatial memory disorder compared with
L-threo-1-phenyl-2-decanoylamino-3-morpholino-1-propanol.

IT 215584-97-7P 215584-98-8P 215585-00-5P 215585-01-6P 219117-39-2P 219117-41-6P

219117-43-8P 219117-45-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. of ceramide analog amino alc. esters for treatment of nerve diseases)

RN 215584-97-7 CAPLUS

CN 4-Oxazolemethanol, 5-(1E)-1-hexenyl-4,5-dihydro-2-nonyl-, (4R,5R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+). Double bond geometry as shown.

HO 
$$\frac{R}{R}$$
  $\frac{(CH_2)_8}{Me}$ 

HO 
$$\frac{R}{R}$$
 O  $(CH_2)_8$  Me

RN 215584-98-8 CAPLUS

CN Morpholine, 4-[[(4R,5R)-5-(1E)-1-hexenyl-4,5-dihydro-2-nonyl-4-oxazolyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+). Double bond geometry as shown.

RN 215585-00-5 CAPLUS

CN 4-Oxazolemethanol, 4,5-dihydro-2-nonyl-5-(1E)-1-pentadecenyl-, (4R,5R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+). Double bond geometry as shown.

RN 215585-01-6 CAPLUS

CN Morpholine, 4-[[(4R,5R)-4,5-dihydro-2-nonyl-5-(1E)-1-pentadecenyl-4-oxazolyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+). Double bond geometry as shown.

RN 219117-39-2 CAPLUS

CN 4-Oxazolemethanol, 5-(1E)-1-hexenyl-4,5-dihydro-2-nonyl-, (4S,5S)- (9CI), (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 219117-41-6 CAPLUS

CN Morpholine, 4-[[(4S,5S)-5-(1E)-1-hexenyl-4,5-dihydro-2-nonyl-4-oxazolyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 219117-43-8 CAPLUS

CN 4-Oxazolemethanol, 4,5-dihydro-2-nonyl-5-(1E)-1-pentadecenyl-, (4S,5S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

Me 
$$(CH_2)_8$$
 OH  $(CH_2)_{12}$ 

RN 219117-45-0 CAPLUS

CN Morpholine, 4-[[(4S,5S)-4,5-dihydro-2-nonyl-5-(1E)-1-pentadecenyl-4-oxazolyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

L5 ANSWER 20 OF 33 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER:

1998:771177 CAPLUS

DOCUMENT NUMBER:

130:85912

TITLE:

Cosmetics for rough skin, wrinkle or pigmentation

disorder prevention

INVENTOR(S):

Abe, Akihito; Yamaki, Kazuhiro

PATENT ASSIGNEE(S):

Kao Corp., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 40 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Japanese LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

APPLICATION NO. DATE KIND DATE PATENT NO. \_\_\_\_\_ -----A2 JP 1997-122424 19970513 19981202 JP 10316550

OTHER SOURCE(S):

MARPAT 130:85912

Cosmetics for rough skin, wrinkle or pigmentation disorder prevention comprise: [a] water- or lower alc.-sol. copolymers contg. hydrophilic segments and organosiloxane segments and [b] active ingredients such as ceramides, amino acids, plant exts., antiinflammatories, singlet oxygen removers, antioxidants, polysaccharides, alcs., sterols and circulation promoters.

IT 208466-22-2P 218434-63-0DP, trimethylsilyl-terminated 219793-10-9P

Patent

RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(cosmetics for rough skin, wrinkle or pigmentation disorder prevention)

208466-22-2 CAPLUS RN

Silanediol, dimethyl-, polymer with 4,5-dihydro-2-methyloxazole and CN 2-heptyl-4,5-dihydrooxazole, graft (9CI) (CA INDEX NAME)

CM

CRN 10431-82-0 CMF C10 H19 N O

$$^{N}$$
 (CH<sub>2</sub>)<sub>6</sub>-Me

2 CM

CRN 1120-64-5 CMF C4 H7 N O

3 CM

CRN 1066-42-8 CMF C2 H8 O2 Si

RN 218434-63-0 CAPLUS

Oxazole, 2-ethyl-4,5-dihydro-, polymer with octamethylcyclotetrasiloxane, CN graft (9CI) (CA INDEX NAME)

CM 1

CRN 10431-98-8 CMF C5 H9 N O

CM 2

CRN 556-67-2 CMF C8 H24 O4 Si4

RN 219793-10-9 CAPLUS

CN 4H-1,3-Oxazine, 5,6-dihydro-2-undecyl-, polymer with .alpha.-[(3-

CM 1

CRN 97917-34-5

CMF (C2 H6 O Si)n C10 H28 N2 O Si2

CCI PMS

CM 2

CRN 24655-61-6 CMF C15 H29 N O

L5 ANSWER 21 OF 33 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER:

1998:561306 CAPLUS

DOCUMENT NUMBER:

129:175646

TITLE:

Preparation of N-(pyridinylmethyl)-

heterocyclylideneamine compounds as nicotinic

acetylcholine receptor binding agents

INVENTOR(S):

Dorff, Peter Hans; Goldstein, Steven Wayne; Jung,

Stanley; Nagel, Arthur Adam

PATENT ASSIGNEE(S):

Pfizer Inc., USA

SOURCE:

the

Eur. Pat. Appl., 26 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

|       | PAT  | ENT  | NO.  |              | KI  | ND    | DATE |      |       | A    | PPLI | CATI     | ON NO | ο.  | DATE |          |     |     |
|-------|------|------|------|--------------|-----|-------|------|------|-------|------|------|----------|-------|-----|------|----------|-----|-----|
|       | EP   | 8577 | 25   | <del>-</del> |     | <br>1 | 1998 | 0812 |       | E    | 19   | <br>97-3 | 0922  | 0   | 1997 | <br>1117 |     |     |
|       | ΕP   | 8577 | 25   |              | В   | 1     | 2001 | 0725 |       |      |      |          |       |     |      |          |     |     |
|       |      | R:   | ΑT,  | BE,          | CH, | DE,   | DK,  | ES,  | FR,   | GB,  | GR,  | IT,      | LI,   | LU, | NL,  | SE,      | MC, | PT, |
|       |      |      | ΙE,  | SI,          | LT, | LV,   | FI,  | RO   |       |      |      |          |       |     |      |          |     |     |
|       | US   | 6020 | 335  |              | A   |       | 2000 | 0201 |       | US   | 19   | 97-9     | 6385  | 2   | 1997 | 1104     |     |     |
|       | CA   | 2220 | 438  |              | A   | Ą     | 1998 | 0806 |       | CF   | 19   | 97-2     | 2204  | 38  | 1997 | 1107     |     |     |
|       | JP   | 1022 | 6684 |              | A.  | 2     | 1998 | 0825 |       | JI   | 19   | 97-3     | 0745  | 5   | 1997 | 1110     |     |     |
|       | AT   | 2035 | 35   |              | E   |       | 2001 | 0815 |       | ľΑ   | 19   | 97-3     | 0922  | 0   | 1997 | 1117     |     |     |
|       | ES   | 2159 | 380  |              | T   | 3     | 2001 | 1001 |       | ES   | 19   | 97-3     | 0922  | 0   | 1997 | 1117     |     |     |
|       | BR   | 9705 | 901  |              | A   |       | 1999 | 0518 |       | BF   | ₹ 19 | 97-5     | 901   |     | 1997 | 1126     |     |     |
| PRIOR | RITY | APP  | LN.  | INFO         | . : |       |      |      | U.    | s 19 | 97-  | 3803     | 6     | P   | 1997 | 0206     |     |     |
| OTHER | R SC | URCE | (S): |              |     | MAR   | PAT  | 129: | L7564 | 6    |      |          |       |     |      |          |     |     |
| GT    |      |      |      |              |     |       |      |      |       |      |      |          |       |     |      |          |     |     |

$$R^3$$
 $A-B$ 
 $[R^1]_n$ 
 $[R^2]_m$ 
 $[R^2]_m$ 
 $[R^3]_m$ 
 $[R^3]_m$ 

AB The title compds. [I; A = CHR (wherein R = H, (un)substituted C1-6 alkyl);

B = II (YW = CH2, NH, O, S, etc.; Z = C, N, O, S; m = 1-2; n = 0-2 with the proviso that n = 0 when Z = O, S, n = 1 when Z = N, and n = 2 when Z

C; R1, R2 = H, H, C1-6 alkyl, C1-6 alkoxy, etc.); R3 = H, halo] and their pharmaceutically acceptable salts and prodrugs, useful in the treatment of

addictive disorders, such as the use of tobacco or other nicotine contg. products, neurol. and mental disorders such as senile dementia of the Alzheimer's type, Parkinson's disease, attentional hyperactivity disorder,

anxiety, obesity, Tourettes Syndrome and ulcerative colitis, were prepd. Thus, reaction of 3-chloromethyl-6-chloropyridine with 2-amino-1,3,4-thiadiazole in the presence of NaI in Me2CO afforded 28%

title compd. III. Compds. I, which were tested, showed IC50 of < 2 .mu.M.

IT 211555-73-6P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of N-(pyridinylmethyl)-heterocyclylideneamine compds. as nicotinic acetylcholine receptor binding agents)

RN 211555-73-6 CAPLUS

CN 3-Pyridinemethanamine, 6-chloro-N-(4,5-dihydro-2-thiazolyl)- (9CI) (CA INDEX NAME)

L5 ANSWER 22 OF 33 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER:

1998:293502 CAPLUS

DOCUMENT NUMBER:

129:4657

TITLE:

Preparation and formulation of heterocyclic amide

compounds as chymase inhibitors

INVENTOR(S):

Akahoshi, Fumihiko; Ashimori, Atsuyuki; Yoshimura, Takuya; Eda, Masahiro; Sakashita, Hiroshi; Nakajima,

Masahide; Imada, Teruaki

PATENT ASSIGNEE(S):

Green Cross Corp., Japan; Akahoshi, Fumihiko;

Ashimori, Atsuyuki; Yoshimura, Takuya; Eda, Masahiro;

Sakashita, Hiroshi; Nakajima, Masahide; Imada,

Teruaki

SOURCE:

PCT Int. Appl., 101 pp.

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE: Patent Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

|      | PAT                          | CENT I                             | NO. |     | KI     | ND    | DATE |      |     |      | APP  | LIC. | ATIC | ON NO | ٥.    | DATE |      |     |    |
|------|------------------------------|------------------------------------|-----|-----|--------|-------|------|------|-----|------|------|------|------|-------|-------|------|------|-----|----|
|      | WO                           | 9818                               | 794 |     | <br>A: | <br>1 | 1998 | 0507 |     |      | wo : | 199  | 7-J1 | 23839 | 9     | 1997 | 1022 |     |    |
|      |                              | W:                                 |     | CN, |        |       |      | no.  | п.  |      | CI   | _    | CD.  | TP    | T ITT | T 11 | мс   | NIT | חת |
| SE   |                              | RW:                                | BE, | CH, | DE,    | DK,   | ES,  | rı,  | rĸ  | , 61 | В,   | GK,  | IE,  | II,   | LU,   | MC,  | ип,  | ΡΙ, |    |
|      | CN                           | 1188                               | 472 |     | А      |       | 1998 | 0722 |     |      | CN . | 199  | 6-19 | 94926 | 5     | 1996 | 0426 |     |    |
|      | ΕP                           | 1 1188472<br>2 940400<br>R: BE, CH |     |     | A      | 1     | 1999 | 0908 |     |      | EP : | 199  | 7-90 | 09602 | 2     | 1997 | 1022 |     |    |
|      |                              | R:                                 | BE, | CH, | DE,    | DK,   | ES,  | FR,  | GB, | ΙT   | , L  | Ι,   | NL,  | SE    |       |      |      |     |    |
|      | CN                           | 1242                               | 014 |     | A      |       | 2000 | 0119 |     |      | CN : | 199  | 7-18 | 31016 | 5     | 1997 | 1022 |     |    |
|      | TW                           | 3934                               | 68  |     | В      |       | 2000 | 0611 |     |      | TW : | 199  | 7-86 | 51156 | 568   | 1997 | 1023 |     |    |
|      | US                           | 6080                               | 738 |     | Α      |       | 2000 | 0627 |     |      | US : | 199  | 9-28 | 3487  | 7     | 1999 | 0422 |     |    |
| PRIO | US 6080738<br>RITY APPLN. IN |                                    |     |     | . :    |       |      |      |     | JР   | 199  | 6-2  | 844  | 71    | Α     | 1996 | 1025 |     |    |
|      |                              |                                    |     |     |        |       |      |      |     | JР   | 199  | 7-1  | 941  | 06    | Α     | 1997 | 0718 |     |    |
|      |                              |                                    |     |     |        |       |      |      | •   | WO   | 199  | 7-J  | P383 | 39    | W     | 1997 | 1022 |     |    |

OTHER SOURCE(S): MARPAT 129:4657

GI

AB The title compds. I [R = H, alkyl, etc.; R5 - R7 = H, alkyl; further detail on R5 - R7 is given; M = C, N; when M is N, R6 does not exist; Y = aryl, etc.; Z = Q1, etc.; R8, R9 = H, alkyl, etc.; A = O, S, etc.; n = 0 or 1] are prepd. I also inhibit the formation of angiotensin II and are useful in preventing and treating various diseases caused by angiotensin II. The title compd. II in vitro inhibited human heart chymase with Ki value of 0.076 .mu.M.

IT 207235-17-4P 207235-18-5P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

R9

(prepn. and formulation of heterocyclic amide compds. as chymase inhibitors)

RN 207235-17-4 CAPLUS

CN Carbamic acid, [1-[2-[[2-(4,5-dihydro-2-oxazolyl)-2-oxo-1-(phenylmethyl)ethyl]amino]-2-oxoethyl]-2-(4-fluorophenyl)-1,6-dihydro-6-oxo-5-pyrimidinyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

RN 207235-18-5 CAPLUS

CN 1(6H)-Pyrimidineacetamide, 5-amino-N-[2-(4,5-dihydro-2-oxazolyl)-2-oxo-1-(phenylmethyl)ethyl]-2-(4-fluorophenyl)-6-oxo- (9CI) (CA INDEX NAME)

IT 207235-77-6P 207235-78-7P 207235-90-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and formulation of heterocyclic amide compds. as chymase inhibitors)

RN 207235-77-6 CAPLUS

CN 2-Oxazolemethanol, .alpha.-(1-amino-2-phenylethyl)-4,5-dihydro- (9CI)

(CA

INDEX NAME)

RN 207235-78-7 CAPLUS

CN Carbamic acid, [2-(4,5-dihydro-2-oxazolyl)-2-hydroxy-1- (phenylmethyl)ethyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

RN 207235-90-3 CAPLUS

CN Carbamic acid, [1-[2-[[2-(4,5-dihydro-2-oxazolyl)-2-hydroxy-1-(phenylmethyl)ethyl]amino]-2-oxoethyl]-2-(4-fluorophenyl)-1,6-dihydro-6-oxo-5-pyrimidinyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

L5 ANSWER 23 OF 33 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1997:648537 CAPLUS

DOCUMENT NUMBER: 127:307379

TITLE: Preparation of benzylidenes as antiallergy agents

INVENTOR(S): Kubo, Junichi; Yonemura, Keiji; Mukai, Mizue

PATENT ASSIGNEE(S):

Hisamitsu Pharmaceutical Co., Japan

Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

SOURCE:

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.

KIND DATE \_\_\_\_\_ \_\_\_\_

APPLICATION NO. DATE

JP 1996-103104

19960322

JP 09255669 OTHER SOURCE(S):

A2 19970930

MARPAT 127:307379

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Benzylidenes I [R1, R2 = H, halo, lower (halo)alkyl, lower alkoxy, OH, AB lower alkoxycarbonyl, lower alkylcarbonyloxy, lower alkoxycarbonylalkenyl;

Ι

R1 and R2 may form (O-substituted) lower alkylene] or their salts, useful for treatment of immediate-type and delayed-type allergy and autoimmune diseases (e.g. chronic rheumatoid arthritis), are prepd. Refluxing quanylthiourea with Et chloroacetate in EtOH for 3 h gave 70% N-(4,5-dihydro-4-oxo-2-thiazolyl) quanidine. HCl, which was treated with PhCHO and AcONa at 80.degree. for 1 h in AcOH to afford 43% I (R1 = R2 = н).

## IT 197441-44-4P

RL: BAC (Biological activity or effector, except adverse); RCT (Reactant);

SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of benzylidenes for treatment of allergy and autoimmune diseases)

197441-44-4 CAPLUS RN

Guanidine, [4,5-dihydro-5-[(4-hydroxy-3-methoxyphenyl)methylene]-4-oxo-2-CN thiazolyl]-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

IT

```
197441-35-3P 197441-36-4P 197441-37-5P
    197441-38-6P 197441-39-7P 197441-40-0P
    197441-41-1P 197441-42-2P 197441-43-3P
    197441-45-5P 197441-46-6P 197441-47-7P
    197441-48-8P 197441-49-9P 197441-50-2P
    197441-51-3P
    RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic
    preparation); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (prepn. of benzylidenes for treatment of allergy and autoimmune
     diseases)
RN
     197441-32-0 CAPLUS
    Guanidine, [4,5-dihydro-4-oxo-5-(phenylmethylene)-2-thiazolyl]-, (Z)-
CN
     (9CI) (CA INDEX NAME)
```

Double bond geometry as shown.

Double bond geometry as shown.

```
RN 197441-34-2 CAPLUS
CN Guanidine, [4,5-dihydro-5-[[4-(1-methylethyl)phenyl]methylene]-4-oxo-2-thiazolyl]-, (Z)- (9CI) (CA INDEX NAME)
```

RN 197441-35-3 CAPLUS
CN Guanidine,
[5-[(4-chlorophenyl)methylene]-4,5-dihydro-4-oxo-2-thiazolyl]-,
(Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

Double bond geometry as shown.

RN 197441-37-5 CAPLUS
CN Guanidine,
[4,5-dihydro-5-[(4-methoxyphenyl)methylene]-4-oxo-2-thiazolyl]-

Double bond geometry as shown.

RN 197441-38-6 CAPLUS

CN Guanidine, [5-[[4-(acetyloxy)phenyl]methylene]-4,5-dihydro-4-oxo-2-thiazolyl]-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 197441-39-7 CAPLUS

CN Benzoic acid, 4-[[2-[(aminoiminomethyl)amino]-4-oxo-5(4H)-thiazolylidene]methyl]-, methyl ester, (Z)- (9CI) (CA INDEX NAME)

RN 197441-40-0 CAPLUS
CN 2-Butenoic acid, 4-[4-[[2-[(aminoiminomethyl)amino]-4-oxo-5(4H)-thiazolylidene]methyl]phenyl]-, ethyl ester, (Z,E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 197441-41-1 CAPLUS
CN Guanidine, [4,5-dihydro-4-oxo-5-[[3-(trifluoromethyl)phenyl]methylene]-2-thiazolyl]-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 197441-42-2 CAPLUS
CN Guanidine, [5-[(2,4-dichlorophenyl)methylene]-4,5-dihydro-4-oxo-2-thiazolyl]-, (Z)- (9CI) (CA INDEX NAME)

RN 197441-43-3 CAPLUS
CN Guanidine, [5-[(3,4-dihydroxyphenyl)methylene]-4,5-dihydro-4-oxo-2-thiazolyl]-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 197441-45-5 CAPLUS
CN Guanidine, [4,5-dihydro-5-[(3-hydroxy-4-methoxyphenyl)methylene]-4-oxo-2-thiazolyl]-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 197441-46-6 CAPLUS
CN Guanidine, [5-[(3,4-dimethoxyphenyl)methylene]-4,5-dihydro-4-oxo-2-thiazolyl]-, (Z)- (9CI) (CA INDEX NAME)

RN 197441-47-7 CAPLUS

CN Guanidine, [5-(1,3-benzodioxol-5-ylmethylene)-4,5-dihydro-4-oxo-2-thiazolyl]-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 197441-48-8 CAPLUS

CN Guanidine,

[5-[[4-(acetyloxy)-3-methoxyphenyl]methylene]-4,5-dihydro-4-oxo-2-thiazolyl]-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 197441-49-9 CAPLUS

CN Guanidine, [4,5-dihydro-5-[(4-hydroxy-3-methoxyphenyl)methylene]-4-oxo-2-thiazolyl]-, monohydrochloride, (Z)- (9CI) (CA INDEX NAME)

## HC1

RN 197441-50-2 CAPLUS

CN Guanidine, [4,5-dihydro-5-[(4-hydroxy-3-methoxyphenyl)methylene]-4-oxo-2-thiazolyl]-, (Z)-, monomethanesulfonate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 197441-44-4 CMF C12 H12 N4 O3 S

Double bond geometry as shown.

CM 2

CRN 75-75-2 CMF C H4 O3 S

RN 197441-51-3 CAPLUS

CN Guanidine, [4,5-dihydro-5-[(4-hydroxy-3-methoxyphenyl)methylene]-4-oxo-2-thiazolyl]-, monosodium salt, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

Na

L5 ANSWER 24 OF 33 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER:

1997:134767 CAPLUS

DOCUMENT NUMBER:

126:143986

TITLE:

Preparation of aromatic hydroxamic acid compounds as

antineurodegenerative agents

INVENTOR(S):

Kato, Kaneyoshi; Sugiura, Yoshihiro; Naruo, Ken-ichi;

Takahashi, Hideki

PATENT ASSIGNEE(S):

Takeda Chemical Industries, Ltd., Japan

SOURCE:

GΙ

Eur. Pat. Appl., 57 pp. CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

|       | PAT        | TENT | NO.  |      | KII | 4D  | DATE | }    |       | AF    | PLI | CATI | ON N  | ο.  | DATE |      |     |     |
|-------|------------|------|------|------|-----|-----|------|------|-------|-------|-----|------|-------|-----|------|------|-----|-----|
|       |            |      |      |      |     |     |      |      |       |       |     |      |       |     |      |      |     |     |
|       | ΕP         | 7499 | 57   |      | A:  | l   | 1996 | 1227 |       | EF    | 19  | 96-3 | 0458: | 2   | 1996 | 0620 |     |     |
|       | ΕP         | 7499 | 57   |      | B   | 1   | 2000 | 0426 |       |       |     |      |       |     |      |      |     |     |
|       |            |      |      |      |     | DE, | DK,  | ES,  | FI,   | FR,   | GB, | GR,  | ΙE,   | IT, | LI,  | LU,  | NL, | PT, |
| SE    | ,          |      |      |      |     |     |      |      |       |       |     |      |       |     |      |      |     |     |
|       | US 5891916 |      |      |      |     |     | 1999 | 0406 |       | US    | 19  | 96-6 | 6224  | 0   | 1996 | 0614 |     |     |
|       | CA         | 2179 | 462  |      | A   | A   | 1996 | 1222 |       | CF    | 19  | 96-2 | 1794  | 62  | 1996 | 0619 |     |     |
|       | JΡ         | 0906 | 7331 |      | A2  | 2   | 1997 | 0311 |       | JE    | 19  | 96-1 | 5930  | 2   | 1996 | 0620 |     |     |
|       | ΑT         | 1921 | 41   |      | E   |     | 2000 | 0515 |       | ΓA    | 19  | 96-3 | 0458  | 2   | 1996 | 0620 |     |     |
| PRIOR | (TI        | APP  | LN.  | INFO | . : |     |      |      | J     | JP 19 | 95- | 1544 | 14    |     | 1995 | 0621 |     |     |
| OTHER | SC         | URCE | (S): |      |     | MAR | PAT  | 126: | 14398 | 36    |     |      |       |     |      |      |     |     |

$$Ar^{2} \xrightarrow{Ar^{2}} Q - CO - NH - O - R^{1}$$

AB The title compds. [I; Ar1, Ar2 = (un) substituted arom. group; Q = (un) substituted divalent aliph. hydrocarbon group optionally contg. O or S; R1 = H, acyl group, etc.; X = an electron-withdrawing group, an optionally substituted arom. group, NR2R3 (wherein R2, R3 = H, acyl group

or (un)substituted hydrocarbon group, etc.)], useful for the treatment of neurodegenerative **diseases**, e.g. Alzheimer's disease, were prepd. and formulated. Thus, treatment of H2NOH in MeOH with 28% NaOMe/MeOH followed by addn. of Et 7-cyano-7,7-diphenylheptanoate in MeOH afforded I [Ar1, Ar2 = Ph; X = CN, Q = (CH2)5; R1 = H] which neutralized the LPS-induced cerebral tissue derangements as shown by the no. of induced circling behavior of 41% relative to those in the control group

in male Wistar rats.

## IT 186523-41-1P 186523-45-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. of arom. hydroxamic acid compds. as antineurodegenerative agents)

RN 186523-41-1 CAPLUS

CN 2-Thiazoleacetonitrile, 4,5-dihydro-.alpha.-phenyl- (9CI) (CA INDEX NAME)

RN 186523-45-5 CAPLUS

L5 ANSWER 25 OF 33 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER:

1997:132770 CAPLUS

DOCUMENT NUMBER:

126:144291

TITLE:

N-pyrazinyl-2-phenyl-3-pyridinesulfonamides and

analogs endothelin receptor antagonists

INVENTOR(S):

Bradbury, Robert Hugh; Butlin, Roger John; James,

Roger

PATENT ASSIGNEE(S):

Zeneca Limited, UK

SOURCE:

PCT Int. Appl., 108 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PAT | FENT | NO. |     | KI  | ND  | DATE |      |     | А   | PPLI | CATI | ON N | ο.  | DATE |      |     |     |
|-----|------|-----|-----|-----|-----|------|------|-----|-----|------|------|------|-----|------|------|-----|-----|
|     |      |     |     |     |     |      |      |     | _   |      |      |      |     |      |      |     |     |
| WO  | 9640 | 681 |     | Α   | 1   | 1996 | 1219 |     | W   | 0 19 | 96-G | B129 | 5   | 1996 | 0603 |     |     |
|     | W:   | AL, | AM, | AT, | ΑU, | ΑZ,  | BB,  | ВG, | BR, | BY,  | CA,  | CH,  | CN, | CZ,  | DE,  | DK, | EE, |
|     |      | ES, | FI, | GB, | GE, | ΗU,  | IL,  | IS, | JP, | KE,  | KG,  | ΚP,  | KR, | ΚZ,  | LK,  | LR, | LS, |
|     |      | LT, | LU, | LV, | MD, | MG,  | MK,  | MN, | MW, | MX,  | NO,  | NZ,  | PL, | PT,  | RO,  | RU, | SD, |
|     |      | SE, | SG  |     |     |      |      |     |     |      |      |      |     |      |      |     |     |
|     | RW:  | KΕ, | LS, | MW, | SD, | SZ,  | ŪĠ,  | AT, | BE, | CH,  | DE,  | DK,  | ES, | FI,  | FR,  | GB, | GR, |
|     |      | ΙE, | IT, | LU, | MC, | NL,  | PT,  | SE, | BF, | ВJ,  | CF,  | CG,  | CI, | CM,  | GΑ,  | GN  |     |
| CA  | 2219 | 742 |     | A   | A   | 1996 | 1219 |     | C.  | A 19 | 96-2 | 2197 | 42  | 1996 | 0603 |     |     |
| AU  | 9658 | 403 |     | A   | 1   | 1996 | 1230 |     | A   | Մ 19 | 96-5 | 8403 |     | 1996 | 0603 |     |     |
| ΑU  | 7150 | 41  |     | В   | 2   | 2000 | 0113 |     |     |      |      |      |     |      |      |     |     |

| EP       | 832082    |       | A.  | 1 1998  | 0401  |       | ΕP   | 199  | 96-9 | 19941 | 1   | 1996  | 0603 |     |     |
|----------|-----------|-------|-----|---------|-------|-------|------|------|------|-------|-----|-------|------|-----|-----|
| EP       | 832082    |       | В:  | 1 2001  | 1121  |       |      |      |      |       |     |       |      |     |     |
|          | R: AT,    | BE,   | CH, | DE, DK, | ES,   | FR,   | GΒ,  | GR,  | IT,  | LI,   | LU, | NL,   | SE,  | MC, | PT, |
|          | IE,       | SI,   | LT, | LV, FI  |       |       |      |      |      |       |     |       |      |     |     |
| CN       | 1192739   |       | Α   | 1998    | 0909  |       | CN   | 199  | 96-1 | 96149 | 9   | 1996  | 0603 |     |     |
| BR       | 9608611   |       | A   | 1999    | 0511  |       | BR   | 199  | 96-8 | 611   |     | 1996  | 0603 |     |     |
| JP       | 11509175  | 5     | T2  | 2 1999  | 0817  |       | JP   | 199  | 96-5 | 00209 | 9   | 1996  | 0603 |     |     |
| JP       | 3193058   |       | B2  | 2 2001  | 0730  |       | JP   | 199  | 97-5 | 00209 | 9   | 1996  | 0603 |     |     |
| ZA       | 9604615   |       | Α   | 1996    | 1209  |       | ZA   | 199  | 96-4 | 615   |     | 1996  | 0604 |     |     |
| US       | 5866568   |       | Α   | 1999    | 0202  |       | US   | 199  | 96-6 | 58969 | 9   | 1996  | 0604 |     |     |
| ИО       | 9705700   |       | Α   | 1997    | 1205  |       | NO   | 199  | 97-5 | 700   |     | 1997  | L205 |     |     |
| US       | 6060475   |       | A   | 2000    | 0509  |       | US   | 199  | 98-2 | 11483 | 3.  | 1998  | L214 |     |     |
| US       | 6258817   |       | В   | 1 2001  | 0710  |       | US   | 200  | 00-5 | 04364 | 4   | 20000 | 215  |     |     |
| PRIORITY | APPLN.    | INFO. | . : |         |       | G     | в 19 | 95-1 | 1150 | 7     | Α   | 1995  | 0607 |     |     |
|          |           |       |     |         |       | G     | в 19 | 95-1 | 1966 | 6     | Α   | 1995  | 927  |     |     |
|          |           |       |     |         |       | W     | o 19 | 96-0 | 3B12 | 95    | W   | 1996  | 0603 |     |     |
|          |           |       |     |         |       | U     | s 19 | 96-6 | 5589 | 69    | Α3  | 19960 | 0604 |     |     |
|          |           |       |     |         |       | U     | s 19 | 98-2 | 2114 | 83    | Α3  | 1998  | L214 |     |     |
| OTHER CO | 11DCF/91. |       |     | MADDAT  | 126.1 | 11129 | 1    |      |      |       |     |       |      |     |     |

OTHER SOURCE(S):

MARPAT 126:144291

GI

AB Title compds. [I; A = atoms to complete an (un)substituted pyridine ring; R = (un)substituted Ph; R1 = (un)substituted heteroarom. ring contg. 2 N atoms] were prepd. Thus, iso-Bu N-(3-methoxy-5-methyl-2-pyrazinyl)carbamate was amidated by 2-chloropyridine-3-sulfonyl chloride (prepn. each given) and the product arylated by 4-(Me2CHCH2)C6H4B(OH)2 to give, after deprotection, title compd. II. Data for biol activity of I were given.

IT 186498-18-0P 186498-19-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. of n-pyrazinyl-2-phenyl-3-pyridinesulfonamides and analogs endothelin receptor antagonists)

RN 186498-18-0 CAPLUS

CN Oxazole, 2-[2-(4-bromophenyl)-1-methylethyl]-4,5-dihydro-4,4-dimethyl-(9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{Me} & \text{Me} \\ \text{Me} & \text{CH-CH}_2 \\ \end{array}$$

RN 186498-19-1 CAPLUS

CN Boronic acid, [4-[2-(4,5-dihydro-4,4-dimethyl-2-oxazolyl)propyl]phenyl]-(9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{OH} & \text{OH} \\ | & \\ \text{Me} & \text{N} \\ | & \\ \text{CH-CH}_2 \end{array}$$

L5 ANSWER 26 OF 33 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1997:34215 CAPLUS

DOCUMENT NUMBER: 126:59946

TITLE: Preparation of aminothiazole derivatives as

ameliorating agents for digestive tract movements

INVENTOR(S): Nagasawa, Masaaki; Murata, Masakazu; Nishioka,

Hiroyasu; Kurimoto, Tadashi; Ueki, Shigeru; Kitagawa,

Osamu

PATENT ASSIGNEE(S): Zeria Pharmaceutical Co., Ltd., Japan; Nagasawa,

Masaaki; Murata, Masakazu; Nishioka, Hiroyasu;

Kurimoto, Tadashi; Ueki, Shigeru; Kitagawa, Osamu

SOURCE: PCT Int. Appl., 101 pp.

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE: Patent Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

GI

|      | PA  | TENT : | NO.  |      | KI   | ND          | DATE |       |      |    | AP | PLI   | CATI          | ON N | ο.    | DATE  |      |      |     |
|------|-----|--------|------|------|------|-------------|------|-------|------|----|----|-------|---------------|------|-------|-------|------|------|-----|
|      | WO  | 9636   | 619  |      | A    | <br>1       | 1996 | 1121  |      |    | WO | 19    | 96-J          | P129 | <br>7 | 1996  | 0516 |      |     |
|      |     |        | •    | •    | ,    |             | KR,  |       | FT   | FI | •  | GB    | GR            | TE   | ΤΨ    | LU,   | мс   | NT.  | DT  |
| SE   |     | 1111   | π.,  | 56,  | 011, | <i>D</i> ., | Dic, | 20,   | ,    |    | ,  | J.D., | Q1 <b>\</b> , | 12,  | ,     | , 10, | 110, | 112, | ,   |
|      | CA  | 2219   | 747  |      | A    | A.          | 1996 | 1121  |      |    | CA | . 19  | 96-2          | 2197 | 47    | 1996  | 0516 |      |     |
|      | ΑU  | 9657   | 024  |      | Α    | 1           | 1996 | 1129  |      |    | AU | 199   | 96-5          | 7024 |       | 1996  | 0516 |      |     |
|      | ΑU  | 6990   | 08   |      | В    | 2           | 1998 | 1119  |      |    |    |       |               |      |       |       |      |      |     |
|      | CN  | 1184   | 471  |      | А    |             | 1998 | 0610  |      |    | CN | 199   | 96-1          | 9400 | 2     | 1996  | 0516 |      |     |
|      | CN  | 1063   | 442  |      | В    |             | 2001 | 0321  |      |    |    |       |               |      |       |       |      |      |     |
|      | ΕP  | 8707   |      |      |      |             | 1998 | 1014  |      |    | ΕP | 19    | 96-9          | 1516 | 7     | 1996  | 0516 |      |     |
|      |     | R:     | ΑT,  | BE,  | CH,  | DE,         | DK,  | ES,   | FR,  | GI | 3, | GR,   | IT,           | LI,  | LU,   | NL,   | SE,  | MC,  | PT, |
|      |     |        | ΙE,  | FI   |      |             |      |       |      |    |    |       |               |      |       |       |      |      |     |
|      | JP  | 3181   | 919  |      | B    | 2           | 2001 | 0703  |      |    | JΡ | 19    | 96-5          | 3470 | 3     | 1996  | 0516 |      |     |
|      | UŞ  | 5981   | 557  |      | А    |             | 1999 | 1109  |      |    | US | 199   | 97-9          | 5210 | 6     | 1997  | 1118 |      |     |
| PRIO | RIT | Y APP  | LN.  | INFO | . :  |             |      |       |      | JΡ | 19 | 95-3  | 1423          | 99   | Α     | 1995  | 0518 |      |     |
|      |     |        |      |      |      |             |      |       |      | WO | 19 | 96-   | JP12          | 97   | W     | 1996  | 0516 |      |     |
| OTHE | R S | OURCE  | (S): |      |      | MAR         | PAT  | 126:5 | 5994 | 6  |    |       |               |      |       |       |      |      |     |

$$R^{1}$$
 $R^{2}$ 
 $COB(CH_{2})_{m}A$ 

AB The title compds. (I; R1, R2, R3 = H, OH, lower alkyl or alkoxy, etc.; R4 = H, lower alkyl; R5 = H, halo, lower alkyl; m = 0-4; A = substituted amino or imino, heterocycle, etc.; B = imino, O) are prepd. I, having potent effects of promoting the movements of the digestive tracts, are

Ι

useful as drugs for upper-abdomen discomfort, malevolence, vomitting, heart burn, appetite loss, stomach pain, feeling of abdominal inflation, chronic stomach inflamation, reflux esophagitis, and postgastrectomy syndrome. Thus, 2-[N-(4,5-dimethoxy-2-hydroxybenzoy1)amino]-4-(ethoxycarbony1)-1,3-thiazole.AcOH (prepn. given) was reacted with (Me2CHNHCH2)2 to give 69% I [R1 = 2-OH, R2 = 4-MeO, R3 = 5-MeO, R4 = R5 = H, <math>m = 2, A = (Me2CH)2N, B = NH] (II). II at 1 mg/kg showed 213.3% movement coeff. when tested on dog i.v.

IT 185103-98-4P 185104-00-1P 185105-41-3P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of aminothiazole derivs. as ameliorating agents for digestive tract movements)

RN 185103-98-4 CAPLUS

CN 4-Thiazolecarboxamide,

N-[2-[(4,5-dihydro-2-thiazolyl)amino]ethyl]-2-[(3,4-dimethoxybenzoyl)amino]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ N & & \\ &$$

RN 185104-00-1 CAPLUS

CN 4-Thiazolecarboxamide,

N-[2-[(4,5-dihydro-2-oxazolyl)amino]ethyl]-2-[(3,4-dimethoxybenzoyl)amino]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ N_{\text{NH}} - \text{CH}_2 - \text{CH}_2 - \text{NH} - \text{C} \\ & & & \\ \end{array} \begin{array}{c|c} & & & \\ N_{\text{NH}} - \text{CH}_2 - \text{CH}_2 - \text{NH} - \text{C} \\ & & & \\ \end{array}$$

RN 185105-41-3 CAPLUS

CN 4-Thiazolecarboxamide, N-[2-[(4,5-dihydro-2-thiazolyl)amino]ethyl]-2[(2,4,5-trimethoxybenzoyl)amino]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} N & \text{NH-} \text{CH}_2\text{-}\text{CH}_2\text{-}\text{NH-}\text{C} \\ \hline & S & \text{MeO} \end{array} \begin{array}{c} O & O \\ M & O \\ MeO & O \\ MeO$$

L5 ANSWER 27 OF 33 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 19

1996:548547 CAPLUS

DOCUMENT NUMBER:

125:195430

TITLE:

Preparation of indoles useful in the treatment of

osteoporosis

INVENTOR(S):

Farina, Carlo; Gagliardi, Stefania; Parini, Carlo; Pinza, Mario; Nadler, Guy Marguerite Marie Gerard;

Morvan, Marcel Jean-Marie

PATENT ASSIGNEE(S): Smithkline Beecham S.P.A., Italy

SOURCE: PCT Int. Appl., 66 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

ΙT

180868-27-3P

|         | TENT  |      |      |     |     | DATE  |      |      |     |      |      |      |      | 0.   | DATE |      |     |     |
|---------|-------|------|------|-----|-----|-------|------|------|-----|------|------|------|------|------|------|------|-----|-----|
|         | 9621  |      |      |     |     |       |      |      |     |      |      | 96-E |      |      | 1996 | 0108 |     |     |
|         | w:    | AL,  | AM,  | AT, | ΑU, | ΑZ,   | BB,  | BG,  | BR  | ₹, 1 | BY,  | CA,  | CH,  | CN,  | CZ,  | DE,  | DK, | EE, |
|         |       | ES,  | FI,  | GB, | GE, | HU,   | IS,  | JP,  | KE  | i, i | KG,  | KP,  | KR,  | KZ,  | LK,  | LR,  | LS, | LT, |
|         |       |      |      |     |     |       |      |      |     |      |      |      |      |      | RO,  |      |     |     |
|         |       | SG,  | SI   |     |     |       |      |      |     |      |      |      |      |      |      |      |     |     |
|         | RW:   | KE,  | LS,  | MW, | SD, | SZ,   | υG,  | AT,  | BE  | 1, ( | CH,  | DE,  | DK,  | ES,  | FR,  | GB,  | GR, | ΙE, |
|         |       |      |      |     |     |       |      |      |     |      |      |      |      |      | GΑ,  |      |     |     |
|         |       | NE,  |      | ·   | •   | •     | •    |      |     | ·    | •    | •    | •    | •    | •    | •    | •   | ·   |
| CA      | 2209  | 936  |      | A   | A   | 1996  | 0718 |      |     | CA   | 19   | 96-2 | 2099 | 36   | 1996 | 0108 |     |     |
|         | 9645  |      |      |     |     |       |      |      |     |      |      |      |      |      |      |      |     |     |
|         | 8029  |      |      |     |     |       |      |      |     |      |      |      |      |      |      |      |     |     |
|         | R:    | AT,  | BE,  | CH, | DE, | DK,   | ĒS,  | FR,  | GB  | 3, ( | GR,  | IT,  | LI,  | LU,  | NL,  | SE,  | MC, | PT, |
|         |       | IE,  | SI   |     |     | •     | -    |      |     |      |      |      |      |      | -    | -    | -   |     |
| BR      | 9606  | 743  |      | Α   |     | 1997  | 1230 |      |     | BR   | 19   | 96-6 | 743  |      | 1996 | 0108 |     |     |
| CN      | 1177  | 957  |      | Α   |     |       |      |      |     |      |      |      |      |      | 1996 |      |     |     |
| JP      | 1051  | 2251 |      | T.  | 2   | 1998  | 1124 |      |     | JP   | 19   | 96-5 | 2145 | 0    | 1996 | 0108 |     |     |
| ZA      | 9600  | 121  |      | Α   |     | 1997  | 0709 |      |     | ZΑ   | 19   | 96-1 | 21   |      | 1996 | 0109 |     |     |
|         | 9702  |      |      |     |     | 1997  | 0909 |      |     | FI   | 19   | 97-2 | 919  |      | 1997 | 0709 |     |     |
| МО      | 9703  | 178  |      | A   |     | 1997  | 0909 |      |     | NO   | 19   | 97-3 | 178  |      | 1997 | 0709 |     |     |
| US      | 5981  | 525  |      | А   |     | 1999  | 1109 |      |     | US   | 199  | 97-8 | 6076 | 0    | 1997 | 1009 |     |     |
| PRIORIT | Y APP | LN.  | INFO | .:  |     |       |      |      | ΙT  | 19   | 95-1 | 0EIN |      | Α    | 1995 | 0110 |     |     |
|         |       |      |      |     |     |       |      |      | ΙT  | 19   | 95-1 | 4I16 | 87   | Α    | 1995 | 0801 |     |     |
|         |       |      |      |     |     |       |      | 1    | WO  | 19   | 96-1 | EP15 | 7    | W    | 1996 | 0108 |     |     |
| OTHER S | OURCE | (S): |      |     | CAS | REAC' | Т 12 | 5:19 | 543 | 30;  | MAI  | RPAT | 125  | :195 | 430  |      |     |     |
| GI      |       |      |      |     |     |       |      |      |     |      |      |      |      |      |      |      |     |     |

$$R^6$$
 $R^7$ 
 $NR^8$ 
 $R^7$ 
 $R^7$ 

The title compds. [I; (i) Ra = H, alkyl, (substituted) aryl and Rb = C(R4):C(R3)C(R2):C(OR1)C(O)X wherein R1 = alkyl, (substituted) aryl;

R2-R4

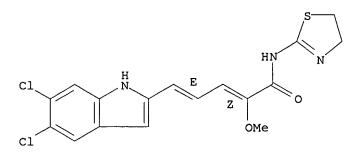
= H, alkyl, (substituted) aryl; X = (substituted) amino, alkoxy; (ii) Ra = C(R4):C(R3)C(R2):C(OR1)C(O)X and Rb = H, alkyl, (substituted) aryl; R6,

R7

= H, OH, NH2, etc.; R8 = H, OH, alkyl, etc.], useful in the treatment of tumors, ulcers, AIDS, Alzheimer's disease and angiogenic diseases, and as immunosuppressants and antilipidemic agents, were prepd. Thus, reaction of propenaldehyde (E)-II with MeOC(O)CH(OMe)P+Ph3.Br- in the presence of 1,5-diazabicyclo[5.4.0]-5-undecene (DBU) in THF afforded (2Z,4E)-I [Ra = H; Rb = CH:CHCH:C(OMe)CO2Me; R6, R7 = 5,6-Cl2; R8 = H] which showed IC50 of 1.1 .mu.M against bafilomycin-sensitive ATPase in chicken osteoclasts.

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of indoles useful in the treatment of osteoporosis)
RN 180868-27-3 CAPLUS
CN 2,4-Pentadienamide, 5-(5,6-dichloro-1H-indol-2-yl)-N-(4,5-dihydro-2-thiazolyl)-2-methoxy-, (Z,E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L5 ANSWER 28 OF 33 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER:

1996:467034 CAPLUS

DOCUMENT NUMBER:

125:142780

TITLE:

Substituted heterocyclic compounds as inhibitors of

nitric oxide synthase

INVENTOR (S):

Shah, Shrenik K.; Grant, Stephan K.; Maccoss,

Malcolm;

Shankaran, Kothandaraman; Qi, Hongbo; Guthikonda,

Ravindra N.

PATENT ASSIGNEE(S):

Merck and Co., Inc., USA

SOURCE: PCT Int. Appl., 75 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATEI      | 1 TM | 10. |      | KII | ND  | DATE |      |     | A    | PPLI  | CATI | и ис | 0. 1 | DATE  |      |     |     |
|------------|------|-----|------|-----|-----|------|------|-----|------|-------|------|------|------|-------|------|-----|-----|
|            |      |     |      |     |     |      |      |     | -    |       |      |      |      |       |      |     |     |
| WO 9       | 6148 | 342 |      | A.  | 1   | 1996 | 0523 |     | W    | 0 19  | 95-U | S145 | 12   | 1995  | 1113 |     |     |
| 7          | W:   | AL, | AM,  | ΑU, | BB, | BG,  | BR,  | BY, | CA,  | CN,   | CZ,  | EE,  | FI,  | GE,   | HU,  | IS, | JP, |
|            |      | KG, | KR,  | ΚZ, | LK, | LR,  | LT,  | LV, | MD,  | MG,   | MK,  | MN,  | MX,  | NO,   | ΝZ,  | PL, | RO, |
|            |      | RU, | SG,  | SI, | SK, | TJ,  | TM,  | TT, | UA,  | US,   | UZ   |      |      |       |      |     |     |
| I          | RW:  | ΚE, | LS,  | MW, | SD, | SZ,  | UG,  | ΑT, | BE,  | CH,   | DE,  | DK,  | ES,  | FR,   | GB,  | GR, | ΙE, |
|            |      | ΙΤ, | LU,  | MC, | NL, | PT,  | SE,  | BF, | ВJ,  | CF,   | CG,  | CI,  | CM,  | GΑ,   | GN,  | ML, | MR, |
|            |      | ΝE, | SN,  | TD, | ΤG  |      |      |     |      |       |      |      |      |       |      |     |     |
| AU 90      | 6414 | 196 |      | A.  | 1   | 1996 | 0606 |     | A    | J 19  | 96-4 | 1496 |      | 1995: | 1113 |     |     |
| PRIORITY A | APPI | LN. | INFO | .:  |     |      |      | 1   | US 1 | 994-  | 3396 | 18   |      | 1994: | 1115 |     |     |
|            |      |     |      |     |     |      |      | 1   | WO 1 | 995-1 | US14 | 512  |      | 1995  | 1113 |     |     |

OTHER SOURCE(S): MARPAT 125:142780

GT

$$R^{2}$$
 $R^{2}$ 
 $R^{2}$ 
 $R^{3}$ 
 $R^{4}$ 
 $NHR^{5}$ 
 $R^{2}$ 
 $R^{3}$ 
 $R^{4}$ 
 $NR^{5}$ 
 $R^{3}$ 
 $R^{4}$ 
 $NH_{2}$ 
 $NH_{2}$ 
 $NH_{2}$ 
 $NH_{2}$ 
 $NH_{2}$ 
 $NH_{2}$ 
 $NH_{2}$ 
 $NH_{3}$ 
 $NH_{4}$ 
 $NH_{5}$ 
 $NH_{5}$ 
 $NH_{5}$ 
 $NH_{6}$ 
 $NH_{7}$ 
 $NH_{1}$ 
 $NH_{1}$ 
 $NH_{2}$ 
 $NH_{2}$ 
 $NH_{2}$ 
 $NH_{3}$ 
 $NH_{4}$ 
 $NH_{5}$ 
 $N$ 

AB Oxazinamines, thiazinamines and pyrimidinamines, and their homologs I (X

N, S, O; n = 0-4; R1-R3 = alkyl, alkenyl, etc.; R4, R5 = H, alkyl, etc.)

and 2-iminooxazines, 2-iminothiazines, 2-iminopyrimidines II (same X, n, R1-R5) were disclosed for the treatment of nitric oxide synthase-mediated diseases and disorders, including neurodegenerative disorders, disorders of gastrointestinal motility and inflammation. Example compds. are 5,6-dihydro-4H-1,3-thiazin-2-amine (III) and 4,5,6,7-tetrahydro-1,3-thiazepin-2-amine (IV). These diseases and disorders include hypotension, septic shock, toxic shock syndrome, hemodialysis, IL-2 therapy such as in cancer patients, cachexia, immunosuppression such as

in
 transplant therapy, autoimmune and/or inflammatory indications including
 sunburn or psoriasis and respiratory conditions such as bronchitis,
 asthma, and acute respiratory distress (ARDS), myocarditis, heart
failure,

atherosclerosis, arthritis, rheumatoid arthritis, chronic or inflammatory bowel disease, ulcerative colitis, systemic lupus erythematosus (SLE), ocular conditions such as ocular hypertension and uveitis, type 1 diabetes, insulin-dependent diabetes mellitus and cystic fibrosis. I are also useful in the treatment of hypoxia, hyperbaric oxygen convulsions

toxicity, dementia, Sydenham's chorea, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, multiple sclerosis, Korsakoff's disease, imbecility related to cerebral vessel disorder, ischemic brain edema, sleeping disorders, schizophrenia, depression, PMS, anxiety, drug addiction, pain, migraine, immune complex disease, as immunosuppressive agents and for preventing or reversing tolerance to opiates and diazepines.

IT 179116-08-6P 179116-12-2P 179116-13-3P 179116-14-4P 179116-15-5P 179116-16-6P 179116-17-7P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of oxazinamine, thiazinamines and pyrimidinamines and homologs as nitric oxide synthase inhibitors)

179116-08-6 CAPLUS

CN 4H-1,3-Thiazin-2-amine, 5,6-dihydro-N-propyl- (9CI) (CA INDEX NAME)

and

RN

RN 179116-12-2 CAPLUS
CN Thiourea,
N-[3-(diethylamino)propyl]-N'-(5,6-dihydro-4H-1,3-thiazin-2-yl)(9CI) (CA INDEX NAME)

RN 179116-13-3 CAPLUS

CN Thiourea,

N-(5,6-dihydro-4H-1,3-thiazin-2-yl)-N'-[3-(dimethylamino)propyl](9CI) (CA INDEX NAME)

RN 179116-14-4 CAPLUS

CN Thiourea,

N-(5,6-dihydro-4H-1,3-thiazin-2-yl)-N'-[2-(dimethylamino)ethyl]-(9CI) (CA INDEX NAME)

RN 179116-15-5 CAPLUS

CN Thiourea,

N-[3-(diethylamino)propyl]-N'-(5,6-dihydro-4H-1,3-thiazin-2-yl)-N-methyl- (9CI) (CA INDEX NAME)

RN 179116-16-6 CAPLUS

CN Thiourea,

N'-(5,6-dihydro-4H-1,3-thiazin-2-yl)-N-[2-(dimethylamino)ethyl]-N-ethyl-(9CI) (CA INDEX NAME)

RN 179116-17-7 CAPLUS

CN Thiourea,

 $\begin{array}{lll} N-[2-(\mbox{diethylamino})\,\mbox{ethyl}]-N'-(5,6-\mbox{dihydro}-4\mbox{H-1},3-\mbox{thiazin}-2-\mbox{yl})-N-\\ &\mbox{ethyl-}\ (9\mbox{CI}) &\mbox{(CA INDEX NAME)} \end{array}$ 

IT 179116-32-6 179116-33-7 179116-34-8 179116-35-9 179116-36-0 179116-37-1

179116-38-2 179116-39-3

RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(prepn. of oxazinamine, thiazinamines and pyrimidinamines and homologs as nitric oxide synthase inhibitors)

RN 179116-32-6 CAPLUS

CN Benzamide, N-(5,6-dihydro-6,6-dimethyl-4H-1,3-thiazin-2-yl)- (9CI) (CA INDEX NAME)

RN 179116-33-7 CAPLUS

CN Thiourea, N-(5,6-dihydro-4H-1,3-thiazin-2-yl)-N'-methyl- (9CI) (CA INDEX NAME)

RN 179116-34-8 CAPLUS

CN Thiourea, N-(5,6-dihydro-4H-1,3-thiazin-2-yl)-N'-ethyl- (9CI) (CA INDEX NAME)

RN 179116-35-9 CAPLUS

CN Thiourea, N-(5,6-dihydro-4H-1,3-thiazin-2-yl)-N'-propyl- (9CI) (CA INDEX NAME)

RN 179116-36-0 CAPLUS

CN Thiourea, N-(5,6-dihydro-4H-1,3-thiazin-2-yl)-N'-(1-methylethyl)- (9CI) (CA INDEX NAME)

RN 179116-37-1 CAPLUS

CN Thiourea, N-butyl-N'-(5,6-dihydro-4H-1,3-thiazin-2-yl)- (9CI) (CA INDEX NAME)

RN 179116-38-2 CAPLUS

CN Thiourea, N-cyclohexyl-N'-(5,6-dihydro-4H-1,3-thiazin-2-yl)- (9CI) (CA INDEX NAME)

RN 179116-39-3 CAPLUS

CN Thiourea, N-(5,6-dihydro-4H-1,3-thiazin-2-yl)-N'-phenyl- (9CI) (CA INDEX NAME)

IT 179116-01-9P 179116-02-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. of oxazinamine, thiazinamines and pyrimidinamines and homologs as nitric oxide synthase inhibitors)

RN 179116-01-9 CAPLUS

RN 179116-02-0 CAPLUS

CN Carbamic acid, [4-[[(aminoiminomethyl)thio]methyl]-4,5-dihydro-2-thiazolyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

ΙT 179116-09-7P 179116-10-0P 179116-11-1P 179116-18-8P 179116-20-2P 179116-40-6P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of oxazinamine, thiazinamines and pyrimidinamines and homologs as nitric oxide synthase inhibitors)

179116-09-7 CAPLUS RN

4H-1,3-Thiazin-2-amine, 5,6-dihydro-N-(1-methylethyl)- (9CI) (CA INDEX CN NAME)

179116-10-0 CAPLUS RN

CN 4H-1,3-Thiazin-2-amine, 5,6-dihydro-N-(2-methylpropyl)- (9CI) (CA INDEX NAME)

179116-11-1 CAPLUS

1,3-Propanediamine, N'-(5,6-dihydro-4H-1,3-thiazin-2-yl)-N,N-dimethyl-(9CI) (CA INDEX NAME)

RN 179116-18-8 CAPLUS

Thiourea,

N'-(5,6-dihydro-4H-1,3-thiazin-2-yl)-N-[2-(dimethylamino)ethyl]-N-(phenylmethyl) - (9CI) (CA INDEX NAME)

RN

179116-20-2 CAPLUS L-Ornithine, N5-(4,5-dihydro-2-thiazolyl)-, monohydrochloride (9CI) (CA CN INDEX NAME)

Absolute stereochemistry.

HCl

RN 179116-40-6 CAPLUS

CN 1,2-Ethanediamine, N'-(5,6-dihydro-4H-1,3-thiazin-2-yl)-N,N-dimethyl-(9CI) (CA INDEX NAME)

L5 ANSWER 29 OF 33 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1996:462225 CAPLUS

DOCUMENT NUMBER: 125:114304

TITLE: N-(ortho-substituted benzyloxy)imine derivatives,

preparation and use as fungicides, acaricides or

insecticides

INVENTOR(S): Ziegler, Hugo; Trah, Stephan; Zurflueh, Rene

PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz. SOURCE: PCT Int. Appl., 60 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

|    | PAT | CENT N         | o.              |     | KII |     | DATE |      |     | A   | PPLI | CATI | ON NO | o.  | DATE |      |     |     |
|----|-----|----------------|-----------------|-----|-----|-----|------|------|-----|-----|------|------|-------|-----|------|------|-----|-----|
|    | WO  | 96111          | 83              |     |     |     | 1996 | 0418 |     | W   | 0 19 | 95-E | P380  | 2   | 1995 | 0926 |     |     |
|    |     | W:             | AM,             | AU, | BB, | BG, | BR,  | BY,  | CA, | CN, | CZ,  | EE,  | FI,   | GE, | HU,  | IS,  | JP, | KG, |
|    |     |                |                 |     |     |     | LR,  |      |     |     |      |      |       |     |      |      |     |     |
|    |     |                | RU,             | SG, | SI, | SK, | ТJ,  | TM,  | TT, | UA, | US,  | UZ,  | VN    |     |      |      |     |     |
|    |     | RW:            | ΑT,             | BE, | CH, | DE, | DK,  | ES,  | FR, | GB, | GR,  | ΙE,  | IT,   | LU, | MC,  | NL,  | PT, | SE  |
|    | CH  | 68922          |                 |     |     |     |      |      |     |     |      |      |       |     |      |      |     |     |
|    | CA  | 22005          | 90              |     | A.  | Ą   | 1996 | 0418 |     | C   | A 19 | 95-2 | 2005  | 90  | 1995 | 0926 |     |     |
|    | ΑU  | 95369          | 90              |     | A.  | 1   | 1996 | 0502 |     | ΙA  | J 19 | 95-3 | 6990  |     | 1995 | 0926 |     |     |
|    |     | 69261          |                 |     |     |     |      |      |     |     |      |      |       |     |      |      |     |     |
|    | ΕP  | 784611         |                 |     | A.  | 1   | 1997 | 0723 |     | E   | P 19 | 95-9 | 3464  | 6   | 1995 | 0926 |     |     |
|    |     | 784611         |                 |     |     |     |      |      |     |     |      |      |       |     |      |      |     |     |
|    |     | R:             |                 |     | CH, | DE, | DK,  | ES,  | FR, | GB, | GR,  | IE,  | IT,   | LI, | LU,  | MC,  | NL, | PT, |
| SE |     |                |                 |     |     |     |      |      |     |     |      |      |       |     |      |      |     |     |
|    |     | 11603          |                 |     |     |     |      |      |     |     |      |      |       |     |      |      |     |     |
|    |     | 95092          |                 |     |     |     | 1997 |      |     |     |      |      |       |     |      |      |     |     |
|    |     | 77295          |                 |     |     |     | 1998 |      |     |     |      |      |       |     |      |      |     |     |
|    |     | 10507          |                 |     |     |     | 1998 |      |     |     |      |      |       |     |      |      |     |     |
|    |     | 18629          | 4               |     | E   |     | 1999 |      |     |     |      |      |       |     | 1995 |      |     |     |
|    |     |                |                 |     |     |     | 2000 |      |     |     |      |      |       |     |      |      |     |     |
|    |     |                |                 |     |     |     | 2001 |      |     |     |      |      |       |     |      |      |     |     |
|    |     |                | 81426<br>508438 |     |     |     | 1996 |      |     |     |      |      |       |     |      |      |     |     |
|    |     | 11554          |                 |     |     |     | 2000 |      |     |     | -    |      |       |     |      |      |     |     |
|    | FI  | 97013<br>58639 | 53              |     | Α   |     | 1997 | 0404 |     | F   | I 19 | 97-1 | 353   |     | 1997 | 0402 |     |     |
|    | US  | 58639          | 51              |     | Α   |     | 1999 | 0126 |     | U:  | S 19 | 97-8 | 0998  | 5   | 1997 | 0403 |     |     |

NO 9701555 A 19970602 NO 1997-1555 19970404
PRIORITY APPLN. INFO.: CH 1994-3033 A 19941007
WO 1995-EP3802 W 19950926

OTHER SOURCE(S): MARPAT 125:114304

GΙ

or

MeO 
$$X$$
  $YR1$   $R3$   $OR4$   $III$   $R3$   $OR4$   $III$   $R3$   $OR4$   $III$   $R4$   $OR4$   $IIII$   $OR4$   $IIII$   $OR4$   $OR4$ 

AB Oxime ethers I and their isomers and isomer mixts. are claimed in which (a) X is an N atom an Y is O or NH, or (b) X is CH and Y is O; R1 is C1-C4

alkyl; R2 is H, C1-C4 alkyl, cyclopropyl or CN; R3 is CN, substituted or unsubstituted di(C1-C6 alkyl)aminocarbonyl, substituted or unsubstituted C1-C6 alkyl-S(O)n, substituted or unsubstituted aryl-S(O)n, substituted

unsubstituted heteroaryl, substituted or unsubstituted heterocyclyl or substituted or unsubstituted heterocyclylcarbonyl; and R4 is C1-C6 alkyl; C1-C6 haloalkyl having 1 to 5 halogen atoms; C1-C4 alkoxy-C1-C2 alkyl; C2-C6 alkenyl which is unsubstituted or substituted by 1 to 3 halogen atoms; C3-C6 alkynyl; C3-C6 cycloalkyl-C1-C4 alkyl which is unsubstituted or substituted by 1-4 halogen atoms, and n = 1 or 2. They are prepd. by reaction of an oxime II with a benzyl deriv. III, or by reaction of an oxime IV with a compd. of formula U-R4, where R1-R4, X and Y are as defined above and U is a leaving group. The compds. are used in microbicidal compds with suitable carriers and optional surfactants. These compds. can be used for controlling plant diseases, insects and pests.

IT 179161-43-4P 179161-44-5P 179161-45-6P 179161-46-7P 179161-47-8P 179161-48-9P 179161-49-0P 179161-72-9P 179161-73-0P 179161-94-5P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(N-(ortho-substituted benzyloxy)imine derivs., prepn. and use as fungicides, acaricides or insecticides)

RN 179161-43-4 CAPLUS

CN Benzeneacetic acid,

2-[5-(4,5-dihydro-2-thiazolyl)-4-methyl-2,7-dioxa-3,6-diazaocta-3,5-dien-1-yl]-.alpha.-(methoxymethylene)-, methyl ester (9CI) (CA INDEX NAME)

RN 179161-44-5 CAPLUS

CN Benzeneacetic acid, 2-[4-cyano-5-(4,5-dihydro-2-thiazolyl)-2,7-dioxa-3,6-diazaocta-3,5-dien-1-yl]-.alpha.-(methoxymethylene)-, methyl ester (9CI) (CA INDEX NAME)

RN 179161-45-6 CAPLUS

CN Benzeneacetic acid,

2-[4-cyclopropyl-5-(4,5-dihydro-2-thiazolyl)-2,7-dioxa-3,6-diazaocta-3,5-dien-1-yl]-.alpha.-(methoxymethylene)-, methyl ester (9CI) (CA INDEX NAME)

RN 179161-46-7 CAPLUS

CN Benzeneacetic acid, 2-[5-(4,5-dihydro-2-thiazolyl)-9,9,9-trifluoro-4-

methyl-2,7-dioxa-3,6-diazanona-3,5-dien-1-yl]-.alpha.-(methoxymethylene)-,
 methyl ester (9CI) (CA INDEX NAME)

RN 179161-47-8 CAPLUS

CN Benzeneacetic acid, 2-[8-(2,2-dichlorocyclopropyl)-5-(4,5-dihydro-2-

thiazolyl)-4-methyl-2,7-dioxa-3,6-diazaocta-3,5-dien-1-yl]-.alpha.- (methoxymethylene)-, methyl ester (9CI) (CA INDEX NAME)

RN 179161-48-9 CAPLUS

CN Benzeneacetic acid, 2-[5-(4,5-dihydro-2-oxazolyl)-4-methyl-2,7-dioxa-3,6-diazaocta-3,5-dien-1-yl]-.alpha.-(methoxymethylene)-, methyl ester (9CI) (CA INDEX NAME)

RN 179161-49-0 CAPLUS

CN Benzeneacetic acid, 2-[5-(4,5-dihydro-4,4-dimethyl-2-oxazolyl)-4-methyl-2,7-dioxa-3,6-diazaocta-3,5-dien-1-yl]-.alpha.-(methoxymethylene)-, methyl

ester (9CI) (CA INDEX NAME)

RN 179161-72-9 CAPLUS

CN Benzeneacetic acid,

2-[5-(4,5-dihydro-2-thiazolyl)-4-methyl-2,7-dioxa-3,6-diazaocta-3,5-dien-1-yl]-.alpha.-(methoxyimino)-, methyl ester (9CI) (CA INDEX NAME)

RN 179161-73-0 CAPLUS

CN Benzeneacetic acid, 2-[5-(4,5-dihydro-4,4-dimethyl-2-oxazolyl)-4-methyl-2,7-dioxa-3,6-diazaocta-3,5-dien-1-yl]-.alpha.-(methoxyimino)-, methyl ester (9CI) (CA INDEX NAME)

RN 179161-94-5 CAPLUS

CN Benzeneacetamide, 2-[5-(4,5-dihydro-2-thiazolyl)-4-methyl-2,7-dioxa-3,6-diazaocta-3,5-dien-1-yl]-.alpha.-(methoxyimino)-N-methyl- (9CI) (CA INDEX

NAME)

#### IT 179162-13-1P 179162-14-2P

RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)

(intermediate; N-(ortho-substituted benzyloxy)imine derivs., prepn.

and

use as fungicides, acaricides or insecticides)

RN 179162-13-1 CAPLUS

CN 1,2-Propanedione, 1-(4,5-dihydro-2-thiazolyl)-, 1-(0-methyloxime) 2-oxime (9CI) (CA INDEX NAME)

RN 179162-14-2 CAPLUS

CN 1,2-Propanedione, 1-(4,5-dihydro-4,4-dimethyl-2-oxazolyl)-, 1-(0-methyloxime) 2-oxime (9CI) (CA INDEX NAME)

ANSWER 30 OF 33 CAPLUS COPYRIGHT 2001 ACS

1996:428453 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 125:86649

Preparation of endothelin antagonists bearing TITLE:

5-membered heterocyclic amides

Ashton, Wallace T.; Chang, Linda L.; Greenlee, INVENTOR(S):

William

J.

PATENT ASSIGNEE(S): Merck and Co., Inc., USA PCT Int. Appl., 177 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PAT      | ENT 1      | .00  |      | KI          | ND  | DATE |      |                 | A    | PPLI | CATI | N NC | ο.       | DATE |      |     |     |
|----------|------------|------|------|-------------|-----|------|------|-----------------|------|------|------|------|----------|------|------|-----|-----|
|          |            |      |      |             |     |      |      |                 |      |      |      |      |          |      |      |     |     |
| WO       | WO 9608486 |      |      | A1 19960321 |     |      |      | WO 1995-US11469 |      |      |      |      | 19950911 |      |      |     |     |
|          | w:         | AM,  | ΑU,  | BB,         | BG, | BR,  | BY,  | CA,             | CN,  | CZ,  | EE,  | FI,  | GE,      | HU,  | IS,  | JP, | KG, |
|          |            | KR,  | ΚZ,  | LK,         | LR, | LT,  | LV,  | MD,             | MG,  | MK,  | MN,  | MX,  | NO,      | ΝZ,  | PL,  | RO, | RU, |
|          |            | SG,  | SI,  | SK,         | ТJ, | TM,  | TT,  | UA,             | US,  | UZ   |      |      |          |      |      |     |     |
|          | RW:        | ΚE,  | MW,  | SD,         | SZ, | UG,  | AT,  | BE,             | ÇН,  | DE,  | DK,  | ES,  | FR,      | GB,  | GR,  | ΙE, | IT, |
|          |            | LU,  | MC,  | NL,         | PT, | SE,  | BF,  | ВJ,             | CF,  | CG,  | CI,  | CM,  | GΑ,      | GN,  | ML,  | MR, | NE, |
|          |            | SN,  | TD,  | TG          |     |      |      |                 |      |      |      |      |          |      |      |     |     |
| US       | 55389      | 991  |      | Α           |     | 1996 | 0723 |                 | U    | s 19 | 94-3 | 0627 | 5        | 1994 | 0914 |     |     |
| AU       | 9535       | 095  |      | Α           | 1   | 1996 | 0329 |                 | A    | U 19 | 95-3 | 5095 |          | 1995 | 0911 |     |     |
| PRIORITY | APP        | LN.  | INFO | .:          |     |      |      | •               | US 1 | 994- | 3062 | 75   |          | 1994 | 0914 |     |     |
|          |            |      |      |             |     |      |      | 1               | WO 1 | 995- | US11 | 469  |          | 1995 | 0911 |     |     |
| OTHER SO | URCE       | (S): |      |             | MAR | PAT  | 125: | 8664            | 9    |      |      |      |          |      |      |     |     |

# \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

The title compds. [I; R1-R3b = H, halogen, NO2, (un) substituted NH2, CF3, Ph, etc; R8 = H, (un) substituted alkyl, (un) substituted Ph; R9, R10 = H, (un) substituted alkyl, alkenyl, alkynyl, halogen, alkoxy, Ph, etc; R12 = (un) substituted heterocyclylalkylaminocarbonyl; X = 0, S(0)n, (un) substituted NH, CH2O, OCH2, direct bond, etc.; n = 0-2; Z =(un) substituted CO2H, tetrazol-5-ylaminocarbonyl, etc.], which have endothelin antagonist activity (no data) and are useful in treating cardiovascular disorders such as hypertension (no data), postischemic renal failure (no data), vasospasm (no data), cerebral and cardiac ischemia (no data), benign prostatic hyperplasia (no data), inflammatory diseases including Raynaud's disease (no data), and asthma (no data), are prepd. Thus, triazole deriv. II, m.p. 108-110.degree., was prepd.

#### IΤ 178620-40-1P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of endothelin receptor antagonists bearing 5-membered heterocyclic amides)

RN 178620-40-1 CAPLUS

CN 1,3-Benzodioxole-5-acetamide, .alpha.-[4-[[(4,5-dihydro-4-oxo-2thiazolyl)amino]carbonyl]-2-propylphenoxy]-N-[[4-(1-methylethyl)phenyl]sulfonyl]- (9CI) (CA INDEX NAME)

### => d 15 31-33 ibib abs hitstr

L5 ANSWER 31 OF 33 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER:

1996:353185 CAPLUS

DOCUMENT NUMBER:

125:33473

TITLE:

Preparation of heterocyclic compounds useful as

allosteric effectors at muscarinic receptors

INVENTOR(S):

Birdsall, Nigel; Lazareno, Sebastian; Naruto, Syunji;

Koyama, Kazuo; Sugimoto, Masahiko; Marumoto, Shinji

PATENT ASSIGNEE(S):

SOURCE:

Sankyo Co., Ltd., Japan PCT Int. Appl., 351 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE \_\_\_\_\_\_ 19950727 WO 9603377 19960208 WO 1995-JP1494 Α1 W: AU, CA, CN, CZ, FI, HU, JP, KR, MX, NO, NZ, RU, US RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE CA 2196046 AΑ 19960208 CA 1995-2196046 19950727 AU 9530866 Α1 19960222 AU 1995-30866 19950727 AU 686426 В2 19980205 19950727 EP 804416 A1 19971105 EP 1995-926509 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, ΙE 19950727 CN 1166169 Α 19971126 CN 1995-195262 19980128 HU 1997-248 19950727 HU 76923 A2 JP 1995-505655 19950727 JP 10503488 T2 19980331 RU 1997-102695 19950727 RU 2152385 C1 20000710 NO 1997-308 19970124 NO 9700308 Α 19970325 FI 9700328 Α 19970327 FI 1997-328 19970127 19990302 US 1997-791499 19970127 US 5877199 Α GB 1994-15175 19940727 PRIORITY APPLN. INFO.: Α GB 1994-23948 Α 19941125 WO 1995-JP1494 W 19950727

OTHER SOURCE(S): MARPAT 125:33473

AB Title compds. [I; 1 of R1,R2 = H, alkyl, alkanoyl, aryl, etc. and the other = H, alkyl, aryl(alkyl); R3 = H, amino-protective group; 1 of Y1-Y4 = CO2H, SO2NH2, carboxyalkyl(oxy), etc. and the others = H, halo, alkyl, alkoxy, etc.; W = CH2, CH, SO0-2; Z = CH2,CH, NH, N; dashed line = optional bond] were prepd. Data for effect of prepd. I on acetylcholine binding were given.

IT 177548-69-5P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of heterocyclic compds. useful as allosteric effectors at muscarinic receptors)

RN 177548-69-5 CAPLUS

CN 2-Oxazolebutanol, 4,5-dihydro-.gamma.-(1H-indol-2-ylthio)-4,4-dimethyl-(9CI) (CA INDEX NAME)

#### IT 177548-68-4P 177550-21-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. of heterocyclic compds. useful as allosteric effectors at muscarinic receptors)

RN 177548-68-4 CAPLUS

CN 2-Oxazolemethanol,

.alpha.-[2-[[(1,1-dimethylethyl)diphenylsilyl]oxy]ethyl
]-4,5-dihydro-.alpha.,4,4-trimethyl- (9CI) (CA INDEX NAME)

RN 177550-21-9 CAPLUS

CN Oxazole,

2-[3-[[(1,1-dimethylethyl)diphenylsilyl]oxy]-1-methylpropyl]-4,5-dihydro-4,4-dimethyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{Me} & \text{Ph} \\ | & | \\ \text{CH-CH}_2\text{-CH}_2\text{-O-Si-Bu-t} \\ | & | \\ \text{Ph} \end{array}$$

L5 ANSWER 32 OF 33 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1996:298393 CAPLUS

DOCUMENT NUMBER: 124:343290

TITLE: Preparation of 5-alkylidene-2-(N-

cyanoimino)thiazolidin-4-ones as aldose reductase

inhibitors

INVENTOR(S): Fumio, Yoneda; Mayumi, Watanabe; Masatoshi, Sakae;

Masanori, Katurada; Takaaki, Sabato

PATENT ASSIGNEE(S): Fujimoto Pharmaceutical Co, Ltd, Japan

SOURCE: Eur. Pat. Appl., 14 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.           | KIND   | DATE            | APPLICATION NO. | DATE     |
|----------------------|--------|-----------------|-----------------|----------|
| EP 697410            | A1     | 19960221        | EP 1995-304416  | 19950623 |
| R: BE, DE,           | FR, GB | , IT, SE        |                 |          |
| JP 08041040          | A2     | 19960213        | JP 1994-209067  | 19940729 |
| US 5750712           | Α      | 19980512        | US 1995-493152  | 19950621 |
| PRIORITY APPLN. INFO | .:     | JР              | 1994-209067     | 19940729 |
| OTHER SOURCE(S):     | MA     | RPAT 124:343290 |                 |          |
| GI                   |        |                 |                 |          |

AB Title compds. [I; R = (Z)-R2(CH:CR1)n][II; each R1 independently = H or alkyl; R2 = (un)substituted Ph, naphthyl; R3 = H, alkyl, CH2CO2R4; R4 = H or alkyl; n = 0 or 1] were prepd. Thus,

2-(N-cyanoimino)thiazolidin-4-one

K salt was condensed with vanillin to give II (R1 = R3 = H, R2 = 4-hydroxy-3-methoxyphenyl, n = 0) which gave 100% inhibition of aldose reductase at 1.0x10-7M in vitro.

IT 176529-65-0P 176529-68-3P 176529-69-4P 176529-70-7P 176529-71-8P 176529-72-9P 176529-73-0P 176529-74-1P 176529-75-2P 176529-76-3P 176529-77-4P 176529-78-5P 176529-79-6P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of 5-alkylidene-2-(N-cyanoimino)thiazolidin-4-ones as aldose reductase inhibitors)

RN 176529-65-0 CAPLUS

CN Cyanamide, [4,5-dihydro-5-(2-methyl-3-phenylpropylidene)-4-oxo-2-thiazolyl]- (9CI) (CA INDEX NAME)

RN 176529-68-3 CAPLUS

CN Cyanamide, [5-(1,3-benzodioxol-5-ylmethylene)-4,5-dihydro-4-oxo-2-thiazolyl]- (9CI) (CA INDEX NAME)

RN 176529-69-4 CAPLUS

CN Cyanamide, [4,5-dihydro-5-(2-naphthalenylmethylene)-4-oxo-2-thiazolyl]- (9CI) (CA INDEX NAME)

RN 176529-70-7 CAPLUS

CN Cyanamide, [4,5-dihydro-4-oxo-5-(phenylmethylene)-2-thiazolyl]- (9CI)

(CA

INDEX NAME)

RN 176529-71-8 CAPLUS

CN Cyanamide, [4,5-dihydro-4-oxo-5-(3-phenylpropylidene)-2-thiazolyl]- (9CI) (CA INDEX NAME)

$$NC-NH$$
 $N$ 
 $CH-CH_2-CH_2-Ph$ 

RN 176529-72-9 CAPLUS

CN Cyanamide, [4,5-dihydro-5-[(6-methoxy-2-naphthalenyl)methylene]-4-oxo-2-thiazolyl]- (9CI) (CA INDEX NAME)

RN 176529-73-0 CAPLUS

CN Cyanamide, [4,5-dihydro-5-(1-naphthalenylmethylene)-4-oxo-2-thiazolyl]-(9CI) (CA INDEX NAME)

RN 176529-74-1 CAPLUS

CN Cyanamide, [4,5-dihydro-5-[(4-hydroxy-3-methoxyphenyl)methylene]-4-oxo-2-thiazolyl]- (9CI) (CA INDEX NAME)

RN 176529-75-2 CAPLUS

CN Cyanamide, [4,5-dihydro-5-[(3-methylphenyl)methylene]-4-oxo-2-thiazolyl](9CI) (CA INDEX NAME)

RN 176529-76-3 CAPLUS

CN Cyanamide,

[4,5-dihydro-5-[(2-methoxyphenyl)methylene]-4-oxo-2-thiazolyl]-(9CI) (CA INDEX NAME)

RN 176529-77-4 CAPLUS

CN Cyanamide, [4,5-dihydro-4-oxo-5-(1-phenylethylidene)-2-thiazolyl]-, potassium salt (9CI) (CA INDEX NAME)

K

RN 176529-78-5 CAPLUS

CN Cyanamide, [4,5-dihydro-4-oxo-5-(1-phenylpropylidene)-2-thiazolyl]- (9CI) (CA INDEX NAME)

RN 176529-79-6 CAPLUS

CN Cyanamide, [4,5-dihydro-5-[1-(2-naphthalenyl)ethylidene]-4-oxo-2-thiazolyl]- (9CI) (CA INDEX NAME)

IT 176529-80-9 176529-81-0 176529-82-1

176529-83-2, 2-(N-Cyanoimino)thiazolidin-4-one

RL: RCT (Reactant)

(prepn. of 5-alkylidene-2-(N-cyanoimino)thiazolidin-4-ones as aldose reductase inhibitors)

RN 176529-80-9 CAPLUS

CN Cyanamide, [4,5-dihydro-5-(2-methyl-3-phenylpropylidene)-4-oxo-2-thiazolyl]-, potassium salt (9CI) (CA INDEX NAME)

K

RN 176529-81-0 CAPLUS

CN Cyanamide, [4,5-dihydro-5-(2-methyl-3-phenylpropylidene)-4-oxo-2-thiazolyl]-, ammonium salt (9CI) (CA INDEX NAME)

NH3

RN 176529-82-1 CAPLUS

CN Cyanamide, (4,5-dihydro-4-oxo-2-thiazolyl)-, potassium salt (9CI) (CA INDEX NAME)

K

RN 176529-83-2 CAPLUS

CN Cyanamide, (4,5-dihydro-4-oxo-2-thiazolyl)- (9CI) (CA INDEX NAME)

L5 ANSWER 33 OF 33 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER:

1996:130808 CAPLUS

DOCUMENT NUMBER:

124:176081

TITLE:

Preparation of 1,3-thiazolidin-4-one derivatives and

analogs as thrombin receptor antagonists

PATENT ASSIGNEE(S):

Fujisawa Pharmaceutical Co., Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 35 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

KIND DATE APPLICATION NO. DATE PATENT NO. \_\_\_\_\_ \_\_\_\_ \_\_\_\_\_ JP 07285952 A2 19951031 JP 1995-67197 19950327 GB 1994-7018 19940408 PRIORITY APPLN. INFO.: GB 1994-17443 19940830

OTHER SOURCE(S): MARPAT 124:176081

GI

$$(R^1)_n$$
 O  $X$  O  $N$  CHCO2Me  $Y$  S I  $Z$  CHCO2Ph

AB The title compds. [I; R1 = lower alkyl, aryl-lower alkyl, lower cycloalkyl, heterocyclyl, acylheterocyclyl, (un)substituted aryl; Y = R2-W:C, R3R4NC, CO; wherein R2 = acyl; W = N, CH; R3 = acyl; R4 = aryl; Z = C:CHR5, CHR7; wherein R5 = (un)protected CO2H, (un)protected amino-lower

alkoxycarbonyl, acyl, (un) substituted aryl, heterocyclyloxy; R7 = H, (un)protected carboxy-lower alkyl; n = 0.1], useful for the treatment of the thrombin receptor-mediated **diseases**, e.g. thrombotic **diseases**, angina pectoris, heart disorder after implantation of a heart pace maker, valvular heart disease after replacement of an artificial heart vulvae, lung infarction, Raynaud syndrome, nephritis, inflammation, and arteriosclerosis, are prepd. Thus, 0.29 mL di-Me butynedioate was added to a suspension of 0.50 g 1-benzoyl-3-phenylthiourea in MeOH and the resulting mixt. was refluxed for 3 h to give the title compd. (II; R = X = H). II (R = Q, X = Cl) showed IC50 of 2.2 .times. 10-6 M for inhibiting the blood platelet aggregation of human platelet rich plasma which was induced by thrombin receptor agonist peptide.

# IT 173904-58-0P 173904-82-0P 173904-83-1P 173904-84-2P 173904-89-7P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of thiazolidinone derivs. and analogs as thrombin receptor antagonists)

RN 173904-58-0 CAPLUS

CN Acetic acid,

[2-[(2-chlorobenzoyl)phenylamino]-4-oxo-5(4H)-thiazolylidene], methyl ester (9CI) (CA INDEX NAME)

RN 173904-82-0 CAPLUS

CN Acetic acid, [2-(benzoylphenylamino)-4-oxo-5(4H)-thiazolylidene]-, methyl ester (9CI) (CA INDEX NAME)

173904-83-1 CAPLUS RN

Acetic acid, [4-oxo-2-[(1-oxo-3-phenyl-2-propenyl)phenylamino]-5(4H)-CN thiazolylidene]-, methyl ester (9CI) (CA INDEX NAME)

RN

 $173904-84-2 \quad \text{CAPLUS} \\ \text{Acetic acid, } [2-(\text{acetylphenylamino})-4-\text{oxo}-5(4\text{H})-\text{thiazolylidene}]-, \text{ methyl} \\$ CN ester (9CI) (CA INDEX NAME)

RN

173904-89-7 CAPLUS
Acetic acid, [2-[(2,4-dichlorobenzoyl)phenylamino]-4-oxo-5(4H)-CN thiazolylidene]-, methyl ester (9CI) (CA INDEX NAME)

---Logging off of STN---

=>
Executing the logoff script...

# => LOG Y

| COST IN U.S. DOLLARS                       | SINCE FILE | TOTAL   |
|--|------------|---------|
|  | ENTRY      | SESSION |
| FULL ESTIMATED COST                        | 178.30     | 312.94  |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE | TOTAL   |
|  | ENTRY      | SESSION |
| CA SUBSCRIBER PRICE                        | -24.11     | -24.11  |

STN INTERNATIONAL LOGOFF AT 17:16:59 ON 27 DEC 2001

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C:\Program Files\Stnexp\Queries\09530807f.str
```

```
5 15 16 17 18 20
ring nodes:
    1 2 3 4 7 8 9 10 11 12 13
chain bonds:
    1-5 4-18 5-7 5-15 13-17 16-16 16-16
ring bonds:
    1-2 1-3 2-13 3-4 4-13 7-8 7-12 8-9 9-10 10-11 11-12
exact/norm bonds:
    1-2 1-3 1-5 2-13 3-4 4-13 4-18 5-7 5-15 7-8 7-12 8-9 9-10 10-11 11-12
13-17 16-16 16-16
isolated ring systems:
    containing 1 : 7 :
```

G1:H,Ak

chain nodes :

Match level:
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 7:CLASS 8:CLASS 9:CLASS 10:CLASS 11:CLASS 12:CLASS 13:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 20:CLASS 21:CLASS